

## Message Information

**Date** 04/09/2012 06:55 PM

**From** OSEI CORP <oseicorp@msn.com>

**To** Steve Mason/R6/USEPA/US@EPA; LisaP Jackson/DC/USEPA/US@EPA

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<jtemperilli@garner-es.com>; <barry.joffrion@placidrefining.com>;  
<karen.g.price@la.gov>; <jeff.meyers@la.gov>; <joe.moore@la.gov>;  
<roland.guidry@la.gov>; <karolien.debusschere@la.gov>;  
<syed.m.qadir@uscg.mil>; <dennis.pepe@state.nm.us>;  
<dana.bahar@state.nm.us>; <ronald.breland@state.nm.us>;  
<dale.magnin@oem.ok.gov>; <fred.liebe@oem.ok.gov>;  
<monty.elder@deq.state.ok.us>; <tom.bergman@deq.state.ok.us>;  
<john.haynes@ttuhsc.edu>; <kcrunk@tceq.state.tx.us>;  
<jlewelli@tceq.state.tx.us>; <jim.ogden@txdps.state.tx.us>;  
<greg.pollock@glo.state.tx.us>; <buzz.martin@glo.state.tx.us>;  
<jt.ewing@glo.state.tx.us>; <michael.baccigalopi@glo.state.tx.us>;  
<john.tintera@rrc.state.tx.us>; <william.miertschin@rrc.state.tx.us>;  
<spweaver@fs.fed.us>; <mmiolano@fs.fed.us>; <charlie.henry@noaa.gov>;  
<lisa.dipinto@noaa.gov>; <mike.davenport@navy.mil>;  
<david.w.sills@mvd02.usace.army.mil>;

**cc** <royce.b.swayne@swd02.usace.army.mrrt>;  
<gary.a.stangeland@swg02.usace.army.mrrt>;  
<michelle.l.clark@swg02.usace.army.mrrt>;  
<constantine.g.marinis@swg02.usace>; <james.wallace@spr.doe.gov>;  
<rick.shutt@spr.doe.gov>; <jellis@doeal.gov>; <william.gibson@spr.doe.gov>;  
<mick.cote@hhs.gov>; <jean.bennett@hhs.gov>; <lorie.lafon@dhs.gov>;  
<joe.howard@dhs.gov>; <tammy.l.prine@uscg.mil>;  
<john.t.hardin@uscg.mil>; <amy.b.cocanour@uscg.mil>;  
<dmacpher@leo.gov>; <matt.orwig3@usdoj.gov>;  
<brit.featherston@usdoj.gov>; <wingo.dean@dol.gov>;  
<wheeler.young@dol.gov>; <villanueva.luis@dol.gov>;  
<poynterm@state.gov>; <stephen\_spencer@ios.doi.gov>;  
<gregory\_hogue@ios.doi.gov>; <herrickl@dot.gov>;  
<stephen.hurst@fmcsa.dot.gov>; <aubrey.campbell@dot.gov>;  
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Ragan Broyles/R6/USEPA/US@EPA; <wells.bob@epa.gov>; Craig  
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<dan.crawford@gsa.gov>; <llh@nrc.gov>; <wam@nrc.gov>

**Subject** FW: EPA meeting request with the OSEI Corp to utilize OSE II for the BP Gulf spill RE: Invitation to Meet

## Message Body

Dear Ragan Broyles, Jim Staves and Steve Mason,

The OSEI Corporation made a formal request to RRT VI, and the US EPA RRT VI for the immediate authorization for BP or the Gulf states to use OSE II for the ongoing Macondo spill, and for permanent pre approval just as you gave the Toxic Corexit 9527, and our request has never been answered. You mentioned in an email you wanted to move forward, I supplied you with dates to meet to move forward, you responded several months after the submitted dates had passed. You then called and your phone call seemed to suggest you wanted to meet, I responded, and still nothing. I respectfully request an immediate answer to my formal requests to the RRT VI in July of 2011. There are spills occurring where OSE II could



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save the responders money on clean up costs, and the US natural resources would be protected as well. Since your email suggested you wanted to move forward, it is time to give the OSEI Corporation our immediate authorization for use in the Gulf of Mexico, and permanent pre approval in writing, in RRT VI. I will await your immediate response.

Sincerely,

Steven Pedigo

From: stevenosei@msn.com

To: mason.steve@epamail.epa.gov; jackson.lisap@epa.gov

Subject: EPA meeting request with the OSEI Corp to utilize OSE II for the BP Gulf spill RE: Invitation to Meet

Date: Thu, 22 Dec 2011 11:35:54 -0600

**To: EPA Officials Broyles Ragan, Jim Staves, and Steve Mason  
Dallas, Texas**

**From: Steven Pedigo – CEO OSEI**

**Date: December 16, 2011**

**Dear Sirs:**

**It is 5:00 PM central standard time on December 16, 2011 and I have not received a response from my email to you addressing your request for a meeting to, as you said, discuss "concerns, and to determine our path moving forward".**

**I responded on November 23<sup>rd</sup>, 2011 to your emailed request dated November 18, 2011 to establish some dates for a meeting, stating that we could meet on December 14, 15, or 16, 2011. That provided 24 days notice of potentially acceptable dates. I asked you for an itinerary of the meeting to be sent to me a minimum of five days prior to the acceptable date. I assume that, despite your request for a meeting, there was no real intention to follow through with that as I have received no response to my email.**

**When I first read your letter of November 18, 2011, it appeared to me to bear remarkable resemblance to a statement made by Jim Makris, an EPA official and Co-Chair of the NRT (EPA's National Response Team) in front of the EPA and RRT 6 (EPA's Regional Response Team 6) in San Antonio in 2000. Jim stated at that time that, after 11 years of us trying to get OSE II pre approved, he thought it was time to move forward. Again, that was 11 years ago. As you can see, your current email (11 years later) shows there was no movement forward, and you were now making a similar statement. It has now been over 22 years that I as an individual and OSEI as a corporation have been requesting pre approval status for the product OSE II and still no movement forward and no valid scientific reason ever provided as to why.**

**It is conceivable that whoever helped develop the email you sent to me knew in February of 2011 that Dana Tulis of the EPA responded to a cease and desist letter I**

wrote to Sam Coleman in your Dallas EPA headquarters and EPA Rep to the RRT6 earlier this year. Dana Tulis stated:

***"OEM is interested in meeting with you to discuss the results of demonstrations and uses of OSE II and to discuss the Agency's effort to revise the requirements under Subpart J of the National Contingency Plan. Please contact Craig Matthiessen of my Office, at 202-564-8016, to discuss a meeting and to address any additional questions you may have."***

I never contacted Mr. Matthiessen as Dana Tulis had asked me to do, because I thought it would be, yet, another, waste of time. As I exposed in a letter to NOAA's Charlie Henry on January 26<sup>th</sup>, 2011, he and Sam Coleman have used verbal innuendo and supposition to wrongfully mischaracterize, prevent and avoid authorization of OSE II for utilization on the BP Deepwater Horizon oil spill. Had I not been willing to meet with you, per your request, I suspect that someone from the EPA would have tried to use that as an excuse to justify "not being able to act" on the formal request I sent to EPA/RRT 6 on July 1, 2011 for immediate authorization and/or pre approval.

Again, should there be a serious interest to do so on your part, I would be happy to meet to discuss this. However, it seemed out of the ordinary that you wanted to spend time with me re-developing a protocol for the use of bioremediation that you admitted has already been developed by other RRT's. And even more strange since the NRT developed a bioremediation protocol in 1992 for the EPA at great taxpayer expense, which I subsequently provided to you for your information. After 22 years, this did not appear to be forward motion as promised by your letter and request to meet.

In my response to your email of November 18, 2011 in which, per your request, I offered up dates that we could meet. I suspect that the reason why the EPA (Ragan Broyles, Jim Staves, Steve Mason) never responded to my willingness to meet, per their request, was based on my statement in the email that the meeting had no bearing on my July 1<sup>st</sup>, 2011 formal request for pre approval. And let me reiterate here, that request stands and I still want an answer immediately.

OSEI's formal request is problematic for the EPA since EPA's Sam Coleman and NOAA's Charlie Henry, for some unexplained reason, tried to wrongfully block OSE II by engaging in the spreading of disinformation about the product. The formal request with the submission of over 350 pages of test data (much of which are tests done by the EPA itself) and extensive successful field use of OSE II has proven that there is no scientific reason not to use OSE II. In your original email to me, you stated you wanted to meet and find a pathway forward; yet now you will not respond to move forward. Even your letter of August 24, 2011 to Steven Pedigo OSEI Corporation, which inaccurately quoted 40 CFR, mandates that you do exactly what I was requesting you to do.

There is a point I want to make here of importance in the history of OSEI's repeated attempts over the past 21 years to receive authorization for use of OSE II

on an oil spill on U.S. navigable waters. Despite the fact that OSE II has gone through the rigorous, expensive and redundant testing demanded of it to be on and stay on the EPA's National Contingency Plan Product Schedule, and the fact that it has shown to be a superlative method of oil spill cleanup, it has never been allowed for use in U.S. navigable waters, with only one exception: EPA used it to clean up the large spill on the Osage Indian Reservation in 2004 that it had not been able to clean up for 2 years until they finally resorted to OSE II, which then cleaned up 100% of the spill in a matter of weeks. Our first formal request for the authorization of OSE II was put in writing to Eric Brethauer of the EPA on February 9, 1990. There have been numerous and repeated subsequent requests for authorization and/or pre approval of OSE II since then, and, to date, there has been no movement forward. In fact, the EPA has developed quite a track record of mischaracterizing OSE II, adding arbitrary hurdles to overcome, performing nefarious acts to block OSE II, and just ignoring our requests over the last 21 years.

You were sent the OSEI letter titled *Economic Comparison* that actually compared OSE II to Exxon's horribly toxic "Corexit dispersants as well as mechanical clean up methods. Comparisons were based on efficacy of clean up, levels of toxicity, human health consequences, natural resource damages, litigation, and costs. The document shows neither Corexit dispersant or mechanical clean up (booms and skimmers) are comparable in any way to the effectiveness and safety of OSE II. Yet the EPA and specific individuals within it are the reason OSE II is not being utilized. By ignoring scientific evidence that your protocols are inadequate and advocating a single dispersant product proven to be toxic and harmful to life while ignoring safer and more effective solutions you have violated the Clean Water Act, violated the EPA's charter and mission statement. The EPA as an agency and key EPA officials are standing squarely in the way of oil spill clean up and by so doing are allowing massive amounts of unnecessary environmental destruction to occur.

I am attaching several documents. One is based on EPA numbers regarding how many gallons of water a gallon or liter of oil will pollute. The Gulf of Mexico has approximately 634 quadrillion gallons of water and, as of early December 2011, the EPA and specific executives within it have allowed, through your ineffective, destructive and inadequate cleanup response methods, the BP Deepwater Horizon (DWH) spill to pollute 0.067% of this entire body of water (the 6<sup>th</sup> largest body of water in the world). As you may know, 0.06 ppm of PAH's cause adverse health effects to humans.

I have been in contact with expert economists and have received one document that shows the spill is causing the Gulf states to lose revenues and property values of approximately \$122 billion a year; and this number is extremely conservative. It can easily be demonstrated that the ongoing spill is costing the Gulf states \$500 billion a year in lost revenue, diminishing property values, other loss to all the peripheral associated businesses that have been economically damaged, and increased drain on the public health system from all of the people who are getting sick and those who will get sick in the future from exposure to the carcinogenic, mutagenic and teratogenic elements in the dispersed oil.

**The economic numbers show the current loss; however, it is estimated through numerous reports that the spill has leaked approximately 2,000,000 gallons of oil a day and has never stopped. On several places on the Internet there is a video showing a third BP well where there is an enormous crater leaking oil. There are numerous ex BP oil spill responders that have stated there is a trench southwest of the well with 80 to 100 feet of oil laying in it, and, per University of Southern Florida scientists, we know there are several inches of oil laying on the Gulf's continental shelf further endangering the U.S. Gulf state's natural resources. What you have as of October 31, 2011 is approximately 1 billion gallons of oil spilled. Some of the oil is going south to the trench and heading southwest towards Mexico with reports from Mexican officials of their shorelines being devastated by the ongoing DWH oil spill. Some of the oil is coming ashore in the U.S., and enormous amounts of oil are in the water column destroying the marine life and fisheries.**

**The ongoing spill has been estimated in reports to be capable of leaking for the next 20 to 30 years, portending massive natural resource damages. And, while this environmental disaster of epic proportions continues, the EPA knows of an utterly effective, relatively inexpensive method of oil spill cleanup which has absolutely no toxic "tradeoffs" or negative side effects; and you are actively blocking its use. What kind of environmental protection is that?**

**Possibly the economic implications and impacts of your decision to pre-approve the use of Corexit may lead to a new look at OSE II.**

**As OSE II costs \$2 for every gallon of oil spilled, if there are 2 million gallons of oil still gushing into Gulf waters per day (as has been reported), that means that for far far less than the cost of Corexit (which does not clean up the oil) and other methods based on current established protocols OSE II can return the area outside of an approximate 5 mile radius of the leaking well(s) and seabed fissures to pre spill conditions while containing within that 5-mile radius the ongoing spewing oil, and minimizing the oil's impact from the second it releases into the environment.**

**So, for approximately \$3.5 billion a year, you can restore an absolute minimum of \$122 billion in revenues. This is an acceptable trade, \$4 billion for \$122 billion and up in revenues (full economic study is available upon request) In other words, if the EPA allowed OSE II to be implemented at or near the beginning of this disaster, the cost would have only been \$400 million to contain the oil within a small finite area around the wellhead, resulting in *no* damage to Gulf state shorelines. The cost of continuing to contain the oil in the geographic area around the wellhead until the mechanical means to plugging the unnatural seepage created by the disaster can be figured out would have been a fraction of the cleanup cost and ensuing economic losses caused by the EPA's decision to allow its ongoing inadequate response and use of toxic chemical dispersants. The tax implications of losing \$122 billion in taxable revenue is a shocking reality of how damaging the EPA's actions have been, and continue to be, for the U.S. Government.**

**One of the most compelling reasons to immediately authorize OSE II for the BP**

**DWH spill is that good people are being needlessly hurt from your unjustifiable decision to not immediately authorize OSE II.**

**As you know the responsible party, BP, requested the use of OSE II in field tests in one of the hardest hit areas - Bay Jimmy; Governor Jindal tried to get OSE II field demonstrated before the oil hit the LA mainland; the Coast Guard letter from their Research and Development center in Groten, CN stated that they should take action with OSE II; three state senators requested the use of OSE II; the city of Destin, FL formally requested the use of OSE II; LA DEQ requested the demonstration of OSE II. These requests to the EPA were either ignored, or verbally denied through inaccurate supposition and innuendo. DOI performed a test earlier this year comparing OSE II, Exxon's toxic Corexit dispersants 9527a and 9500, and mechanical clean up methods, proving OSE II was the most efficient clean up method/product; and in every case the finger points directly to the EPA actively blocking the use of the world's most efficient, non toxic, safest (for humans, marine species, and wildlife) means to address 100% of the BP DWH ongoing oil spill.**

**With this much destruction raging through the Gulf, it is time for the EPA to stop using unscientific supposition, false innuendo, mischaracterizations, misinformation and nefarious acts against OSE II. It is time to send a document immediately authorizing the utilization of OSE II by BP or the effected Gulf states in order for them to be able to protect and restore their natural resources.**

**Once again I will await the document authorizing OSE II from the EPA/RRT 6, and, if you still want to meet and discuss the redundant protocol, I am willing; just let me know.**

**Sincerely,  
Steven Pedigo  
CEO/Chairman OSEI Corporation**

**P.S. Given the track record of response to my official requests, I have decided to info copy several investigative journalists and media outlets on our correspondence going forward to make this a matter of public record in defense of the victims of this disaster. Additionally, so there can be no misunderstandings, I have attached documents that support my statements herein.**

**ATTACHMENTS/DOCUMENTATION:**

- 1. 7/1 OSEI's formal request to EPA RRTs from CEO OSEI**  
<http://www.osei.us/reports>
- 2. 8/24 RRT 6 Response to OSEI CEO Formal Pre-Approval Request**
- 3. OSEI CEO Response to 8/24 RRT 6 Response**
- 4. Meeting Request from RRT 6 Reps 18/11**
- 5. OSEI CEO Reply to 18/11 RRT 6 Meeting Request**
- 6. No Response from RRT 6 to attachment 5 prompting this letter.**
- 7. Historical Perspective and other Documentation:**

- a. 2004 EPA Meeting, Congressman Pete Sessions (Historical Perspective)**
- b. 1990, OSEI Corporation, First Formal Request to EPA, Eric Bretthauer**
- c. Economic Impact/Contamination Calculations Worksheet**
- d. Economic Comparison Paper**
- e. OSE II Third Party Endorsements/Scientific Testing**

**Additional information** The EPA Time Track here shows how Oil Spill Eater should have been used sooner on the clean up in Gulf and still should be used. <http://bit.ly/m1xCtq>  
When visiting the link for the EPA Time Track please allow time for download the document is 54MB.

From: stevenosei@msn.com  
To: mason.steve@epamail.epa.gov  
Subject: RE: Invitation to Meet  
Date: Wed, 23 Nov 2011 14:31:38 -0600

Dear Mr. Mason, Mr. Staves and Mr. Broyles,

I am in receipt of your 11/20/2011 email request for a meeting with me. As you know, OSE II has been on the NCP list for oil spill cleanup since 1989. Despite that, the only product that the EPA has ever given "pre approval status" to for use on U.S. navigable waters is Exxon's product, Corexit. As you are aware, I have requested EPA authorization or permitting for specific spills, and pre approval status overall for OSE II for years, providing in-depth and comprehensive documentation to support my requests. To date, every request by the OSEI Corporation and by other government agencies, elected officials, and responsible parties has been ignored, or verbally denied through inaccurate claims and innuendo by EPA officials.

As you must know, "pre-approval status" given by the EPA to Exxon's product, Corexit, has created a monopoly for Exxon in the field of oil spill cleanup on U.S. navigable waters for the past 23 years. Only when a product has pre approval status will oil spill response companies that stage equipment and chemicals agree to purchase and stockpile the product in large enough quantities to handle possible future emergency spills. The EPA's decisions and actions have also created a situation in which any responsible party that had a spill had a choice of only one product - Corexit. By not allowing OSE II to be pre-approved, corporate executives responsible for oil spill response preparation are not willing to purchase OSE II for their emergency response stockpiles, even though it is the only non-toxic, *first response* (meaning it can clean up fresh as well as weathered oil) product on the NCP list, and that has the scientifically substantiated predictable end result of cleaning up 100% of the oil. But without pre approval status, why would a company purchase a product for stockpiling if, in the event of an actual spill event, there is still the barrier of obtaining authorization for its implementation, which, in the EPA's history, has never been given to any other product than Corexit? Because of the EPA's actions, Corexit has been sole sourced and there has been a closed system to any other product being utilized as an emergency response tool for a spill.

Therefore, let me repeat here, that my formal request for the authorization or permitting and pre approval status for OSE II on July 1<sup>st</sup> to the RRT VI stands and needs to be immediately approved, or denied. And, if denied, a full written description must be supplied to the OSEI Corporation as to the exact scientific reasons why it is being denied.

I am happy to meet with you to discuss the facts of the my July 1<sup>st</sup> letter, the EPA's August 24<sup>th</sup> letter, my October 1<sup>st</sup> letter, and your November 18<sup>th</sup> letter. Please provide the exact itinerary of the meeting at least 5 days prior, and whether there is any information you expect me to provide that has not been previously provided to EPA and the USCG.

I am available to meet on either December 14<sup>th</sup>, 15<sup>th</sup>, or 16<sup>th</sup>, 2011. We can meet at the Hyatt around the corner from your office in Dallas, TX in the second floor atrium room.

Your email indicates that you want to discuss my "concerns" expressed in my 10/1/2011 letter. I presented only facts, not concerns, in that letter, so I am somewhat puzzled about this. In addition, your email discusses the potential of developing a bioremedial emergency response plan as "other Regions have [developed]." I don't understand the need to re-develop what you say has already been developed; and I submitted the bioremediation protocol for bioremediation products that was developed in 1992 with taxpayer funds for the EPA by the NRT. Regardless, you seem to leave an "out." A bioremedial plan is what the public wants, and is necessary in light of the fact that the only solution now authorized by EPA is for two Exxon products that are chemically toxic: Corexit 9527A and 9500.

You then indicate that you want me to work with the industry group to develop already existing bioremedial protocols. You may not know that I have written protocols that are being used by several USCG districts, foreign countries for pipelines, refineries and emergency response oil spills. My time is valuable and costly. Although I am willing to assist moving this forward, I do not have the time or inclination to participate in a circular process (which in my experience has been the pattern in my dealings with the EPA over the past 23 years) ending up in a lot of effort for all parties involved with no beneficial result.

I am willing to work with you, but I am steadfast in my demand for immediate authorization. The Macondo 252 well is still leaking oil, and the authorization for use of OSE II is critical to the recovery of the health and wellbeing of the Gulf and its inhabitants.

I await your response.

Steven Pedigo

To: stevenosei@msn.com  
CC: broyles.ragan@epa.gov; staves.james@epa.gov  
Subject: Invitation to Meet  
From: Mason.Steve@epamail.epa.gov  
Date: Fri, 18 Nov 2011 09:24:41 -0600

Steven,

In response to your letter on October 1, we would like to meet with you to discuss your concerns and determine our path forward. In addition, the Region 6 Regional Response Team (RRT) will be considering the potential of developing a Bioremediation Emergency Response Plan, as other regions have developed. If this is successful, we would like to have you assist in the development of such a document, working with the RRT Industry Workgroup.

Please contact me to see when you would be available to meet with Ragan Broyles, Jim Staves, and myself after December 1, at 214-665-2276, or email me with potential dates you are available to meet. We can either meet at our offices, or other location around Dallas.

Faithfully yours  
Steve

"Frequently, my thoughts get bored and walk down to my mouth. Often, this is a bad thing."

Steve Mason, EPA Region 6 (6SF-PE)  
1445 Ross Avenue, Dallas, TX 75202  
214-665-2276 / 214-665-2278 fax





OSEI third response to EPA RRT 8 Steve Mason December 16, 2011 .doc



OSEI second response the EPA RRT 6 11 20 2011.doc



OSEI\_Response\_to\_RRT\_VIEPA\_letter\_of\_8\_24\_11\_responding\_to\_OSEI\_request\_for\_Pre\_approval\_7\_1\_2011-1.docx



EPA RRT 6 response 8 24 2011 to my pre approval request of 7 1 2011 Page 1.pdf



EPA RRT 6 response 8 24 2011 to my pre approva request 7 1 2011 Page 2-1.pdf



EPA RRT 6 email Steve Mason 11 18 2011 .docxEPA Eric Brethauer letters january 4 and february 1990 .docx



Congressman Pete Sessions Meeting- EPA OSEI Corporation January28, 2004-1.pdf



OSEI Economic Comparison final I 12 21 2011 AI-6.docx



Pollution Calculation for the Gulf of Mexico 643 quadrillion gallons of water allowed by the US EPA 12 20 2011 .pdf



OSEI third party endorsements and science emulating mother nature document 12 20 2011 .docx

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## OEX Processing Information

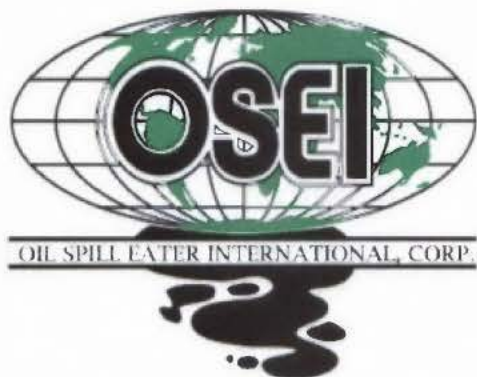
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**To: EPA Officials Broyles Ragan, Jim Staves,  
and Steve Mason  
Dallas, Texas**

**From: Steven Pedigo – CEO OSEI**

**Date: December 16, 2011**

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When I first read your letter of November 18, 2011, it appeared to me to bear remarkable resemblance to a statement made by Jim Makris, an EPA official and Co-Chair of the NRT (EPA's National Response Team) in front of the EPA and RRT 6 (EPA's Regional Response Team 6) in San Antonio in 2000. Jim stated at that time that, after 11 years of us trying to get OSEI pre approved, he thought it was time to move forward. Again, that was 11 years ago. As you can see, your current email (11

years later) shows there was no movement forward, and you were now making a similar statement. It has now been over 22 years that I as an individual and OSEI as a corporation have been requesting pre approval status for the product OSE II and still no movement forward and no valid scientific reason ever provided as to why.

It is conceivable that whoever helped develop the email you sent to me knew in February of 2011 that Dana Tulis of the EPA responded to a cease and desist letter I wrote to Sam Coleman in your Dallas EPA headquarters and EPA Rep to the RRT6 earlier this year. Dana Tulis stated:

*"OEM is interested in meeting with you to discuss the results of demonstrations and uses of OSE II and to discuss the Agency's effort to revise the requirements under Subpart J of the National Contingency Plan. Please contact Craig Matthiessen of my Office, at 202-564-8016, to discuss a meeting and to address any additional questions you may have."*

I never contacted Mr. Matthiessen as Dana Tulis had asked me to do, because I thought it would be, yet, another, waste of time. As I exposed in a letter to NOAA's Charlie Henry on January 26<sup>th</sup>, 2011, he and Sam Coleman have used verbal innuendo and supposition to wrongfully mischaracterize, prevent and avoid authorization of OSE II for utilization on the BP Deepwater Horizon oil spill. Had I not been willing to meet with you, per your request, I suspect that someone from the EPA would have tried to use that as an excuse to justify "not being able to act" on the formal request I sent to EPA/RRT 6 on July 1, 2011 for immediate authorization and/or pre approval.

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In my response to your email of November 18, 2011 in which, per your request, I offered up dates that we could meet. I suspect that the reason why the EPA (Ragan Broyles, Jim Staves, Steve Mason) never responded to my willingness to meet, per their request, was based on my statement in the email that the meeting had no bearing on my July 1<sup>st</sup>, 2011 formal request for pre approval. And let me reiterate here, that request stands and I still want an answer immediately.

OSEI's formal request is problematic for the EPA since EPA's Sam Coleman and NOAA's Charlie Henry, for some unexplained reason, tried to wrongfully block OSE II by engaging in the spreading of disinformation about the product. The formal request with the submission of over 350 pages of test data (much of which are tests done by the EPA itself) and extensive successful field use of OSE II has proven that there is no scientific reason not to use OSE II. In your original email to me, you stated you wanted to meet and find a pathway forward; yet now you will not respond to move forward. Even your letter of August 24, 2011 to Steven Pedigo OSEI Corporation, which inaccurately quoted 40 CFR, mandates that you do exactly what I was requesting you to do.

There is a point I want to make here of importance in the history of OSEI's repeated attempts over the past 21 years to receive authorization for use of OSE II on an oil spill on U.S. navigable waters. Despite the fact that OSE II has gone through the rigorous, expensive and redundant testing demanded of it to be on and stay on the EPA's National Contingency Plan Product Schedule, and the fact that it has shown to be a superlative method of oil spill cleanup, it has never been allowed for use in U.S. navigable waters, with only one exception: EPA used it to clean up the large spill on the Osage Indian Reservation in 2004 that it had not been able to clean up for 2 years until they finally resorted to OSE II, which then cleaned up 100% of the spill in a matter of weeks. Our first formal request for the authorization of OSE II was put in writing to Eric Brethauer of the EPA on February 9, 1990. There have been numerous and repeated subsequent requests for authorization and/or pre approval of OSE II since then, and, to date, there has been no movement forward. In fact, the EPA has developed quite a track record of mischaracterizing OSE II, adding arbitrary hurdles to overcome, performing nefarious acts to block OSE II, and just ignoring our requests over the last 21 years.

You were sent the OSEI letter titled *Economic Comparison* that actually compared OSE II to Exxon's horribly toxic "Corexit dispersants as well as mechanical clean up methods. Comparisons were based on efficacy of clean up, levels of toxicity, human health consequences, natural resource damages, litigation, and costs. The document shows neither Corexit dispersant or mechanical clean up (booms and skimmers) are comparable in any way to the effectiveness and safety of OSE II. Yet the EPA and specific individuals within it are the reason OSE II is not being utilized. By ignoring scientific evidence that your protocols are inadequate and advocating a single dispersant product proven to be toxic and harmful to life while ignoring safer and more effective solutions you have violated the Clean Water Act, violated the EPA's charter and mission statement. The EPA as an agency and key EPA officials are standing squarely in the way of oil spill clean up and by so doing are allowing massive amounts of unnecessary environmental destruction to occur.

I am attaching several documents. One is based on EPA numbers regarding how many gallons of water a gallon or liter of oil will pollute. The Gulf of Mexico has approximately 634 quadrillion gallons of water and, as of early December 2011, the

EPA and specific executives within it have allowed, through your ineffective, destructive and inadequate cleanup response methods, the BP Deepwater Horizon (DWH) spill to pollute 0.067% of this entire body of water (the 6<sup>th</sup> largest body of water in the world). As you may know, 0.06 ppm of PAH's cause adverse health effects to humans.

I have been in contact with expert economists and have received one document that shows the spill is causing the Gulf states to lose revenues and property values of approximately \$122 billion a year; and this number is extremely conservative. It can easily be demonstrated that the ongoing spill is costing the Gulf states \$500 billion a year in lost revenue, diminishing property values, other loss to all the peripheral associated businesses that have been economically damaged, and increased drain on the public health system from all of the people who are getting sick and those who will get sick in the future from exposure to the carcinogenic, mutagenic and teratogenic elements in the dispersed oil.

The economic numbers show the current loss; however, it is estimated through numerous reports that the spill has leaked approximately 2,000,000 gallons of oil a day and has never stopped. On several places on the Internet there is a video showing a third BP well where there is an enormous crater leaking oil. There are numerous ex BP oil spill responders that have stated there is a trench southwest of the well with 80 to 100 feet of oil laying in it, and, per University of Southern Florida scientists, we know there are several inches of oil laying on the Gulf's continental shelf further endangering the U.S. Gulf state's natural resources. What you have as of October 31, 2011 is approximately 1 billion gallons of oil spilled. Some of the oil is going south to the trench and heading southwest towards Mexico with reports from Mexican officials of their shorelines being devastated by the ongoing DWH oil spill. Some of the oil is coming ashore in the U.S., and enormous amounts of oil are in the water column destroying the marine life and fisheries.

The ongoing spill has been estimated in reports to be capable of leaking for the next 20 to 30 years, portending massive natural resource damages. And, while this environmental disaster of epic proportions continues, the EPA knows of an utterly effective, relatively inexpensive method of oil spill cleanup which has absolutely no toxic "tradeoffs" or negative side effects; and you are actively blocking its use. What kind of environmental protection is that?

Possibly the economic implications and impacts of your decision to pre-approve the use of Corexit may lead to a new look at OSE II.

As OSE II costs \$2 for every gallon of oil spilled, if there are 2 million gallons of oil still gushing into Gulf waters per day (as has been reported), that means that for far



farless than the cost of Corexit (which does not clean up the oil) and other methods based on current established protocols OSE II can return the area outside of an approximate 5 mile radius of the leaking well(s) and seabed fissures to pre spill conditions while containing within that 5-mile radius the ongoing spewing oil, and minimizing the oil's impact from the second it releases into the environment.

So, for approximately \$3.5 billion a year, you can restore an absolute minimum of \$122 billion in revenues. This is an acceptable trade, \$4 billion for \$122 billion and up in revenues (full economic study is available upon request) In other words, if the EPA allowed OSE II to be implemented at or near the beginning of this disaster, the cost would have only been \$400 million to contain the oil within a small finite area around the wellhead, resulting in *no* damage to Gulf state shorelines. The cost of continuing to contain the oil in the geographic area around the wellhead until the mechanical means to plugging the unnatural seepage created by the disaster can be figured out would have been a fraction of the cleanup cost and ensuing economic losses caused by the EPA's decision to allow its ongoing inadequate response and use of toxic chemical dispersants. The tax implications of losing \$122 billion in taxable revenue is a shocking reality of how damaging the EPA's actions have been, and continue to be, for the U.S. Government.

One of the most compelling reasons to immediately authorize OSE II for the BP DWH spill is that good people are being needlessly hurt from your unjustifiable decision to not immediately authorize OSE II.

As you know the responsible party, BP, requested the use of OSE II in field tests in one of the hardest hit areas - Bay Jimmy; Governor Jindal tried to get OSE II field demonstrated before the oil hit the LA mainland; the Coast Guard letter from their Research and Development center in Groten, CN stated that they should take action with OSE II; three state senators requested the use of OSE II; the city of Destin, FL formally requested the use of OSE II; LA DEQ requested the demonstration of OSE II. These requests to the EPA were either ignored, or verbally denied through inaccurate supposition and innuendo. DOI performed a test earlier this year comparing OSE II, Exxon's toxic Corexit dispersants 9527a and 9500, and mechanical clean up methods, proving OSE II was the most efficient clean up method/product; and in every case the finger points directly to the EPA actively blocking the use of the world's most efficient, non toxic, safest (for humans, marine species, and wildlife) means to address 100% of the BP DWH ongoing oil spill.

With this much destruction raging through the Gulf, it is time for the EPA to stop using unscientific supposition, false innuendo, mischaracterizations, misinformation and nefarious acts against OSE II. It is time to send a document immediately authorizing the utilization of OSE II by BP or the effected Gulf states in order for them to be able to protect and restore their natural resources.

Once again I will await the document authorizing OSE II from the EPA/RRT 6, and, if you still want to meet and discuss the redundant protocol, I am willing; just let me know.

Sincerely,

Steven Pedigo

CEO/Chairman OSEI Corporation

P.S. Given the track record of response to my official requests, I have decided to info copy several investigative journalists and media outlets on our correspondence going forward to make this a matter of public record in defense of the victims of this disaster. Additionally, so there can be no misunderstandings, I have attached documents that support my statements herein.

**ATTACHMENTS/DOCUMENTATION:**

1. 7/1 OSEI's formal request to EPA RRTs from CEO OSEI
2. 8/24 RRT 6 Response to OSEI CEO Formal Pre-Approval Request
3. OSEI CEO Response to 8/24 RRT 6 Response
4. Meeting Request from RRT 6 Reps 18/11
5. OSEI CEO Reply to 18/11 RRT 6 Meeting Request
6. No Response from RRT 6 to attachment 5 prompting this letter.
7. Historical Perspective and other Documentation:
  - a. 2004 EPA Meeting, Congressman Pete Sessions (Historical Perspective)
  - b. 1990, OSEI Corporation, First Formal Request to EPA, Eric Bretthauer
  - c. Economic Impact/Contamination Calculations Worksheet
  - d. Economic Comparison Paper
  - e. OSE II Third Party Endorsements/Scientific Testing

Dear Mr. Mason, Mr. Staves and Mr. Broyles,

I am in receipt of your 11/20/2011 email request for a meeting with me. As you know, OSE II has been on the NCP list for oil spill cleanup since 1989. Despite that, the only product that the EPA has ever given "pre approval status" to for use on U.S. navigable waters is Exxon's product, Corexit. As you are aware, I have requested EPA authorization or permitting for specific spills, and pre approval status overall for OSE II for years, providing in-depth and comprehensive documentation to support my requests. To date, every request by the OSEI Corporation and by other government agencies, elected officials, and responsible parties has been ignored, or verbally denied through inaccurate claims and innuendo by EPA officials.

As you must know, "pre-approval status" given by the EPA to Exxon's product, Corexit, has created a monopoly for Exxon in the field of oil spill cleanup on U.S. navigable waters for the past 23 years. Only when a product has pre approval status will oil spill response companies that stage equipment and chemicals agree to purchase and stockpile the product in large enough quantities to handle possible future emergency spills. The EPA's decisions and actions have also created a situation in which any responsible party that had a spill had a choice of only one product - Corexit. By not allowing OSE II to be pre-approved, corporate executives responsible for oil spill response preparation are not willing to purchase OSE II for their emergency response stockpiles, even though it is the only non-toxic, *first response* (meaning it can clean up fresh as well as weathered oil) product on the NCP list, and that has the scientifically substantiated predictable end result of cleaning up 100% of the oil. But without pre approval status, why would a company purchase a product for stockpiling if, in the event of an actual spill event, there is



still the barrier of obtaining authorization for its implementation, which, in the EPA's history, has never been given to any other product than Corexit? Because of the EPA's actions, Corexit has been sole sourced and there has been a closed system to any other product being utilized as an emergency response tool for a spill.

Therefore, let me repeat here, that my formal request for the authorization or permitting and pre approval status for OSE II on July 1<sup>st</sup> to the RRT VI stands and needs to be immediately approved, or denied. And, if denied, a full written description must be supplied to the OSEI Corporation as to the exact scientific reasons why it is being denied.

I am happy to meet with you to discuss the facts of the my July 1<sup>st</sup> letter, the EPA's August 24<sup>th</sup> letter, my October 1<sup>st</sup> letter, and your November 18<sup>th</sup> letter. Please provide the exact itinerary of the meeting at least 5 days prior, and whether there is any information you expect me to provide that has not been previously provided to EPA and the USCG.

I am available to meet on either December 14<sup>th</sup>, 15<sup>th</sup>, or 16<sup>th</sup>, 2011. We can meet at the Hyatt around the corner from your office in Dallas, TX in the second floor atrium room.

Your email indicates that you want to discuss my "concerns" expressed in my 10/1/2011 letter. I presented only facts, not concerns, in that letter, so I am somewhat puzzled about this. In addition, your email discusses the potential of developing a bioremedial emergency response plan as "other Regions have [developed]." I don't understand the need to re-develop what you say has already been developed; and I submitted the bioremediation protocol for bioremediation products that was developed in 1992 with taxpayer funds for

the EPA by the NRT. Regardless, you seem to leave an “out.” A bioremedial plan is what the public wants, and is necessary in light of the fact that the only solution now authorized by EPA is for two Exxon products that are chemically toxic: Corexit 9527A and 9500.

You then indicate that you want me to work with the industry group to develop already existing bioremedial protocols. You may not know that I have written protocols that are being used by several USCG districts, foreign countries for pipelines, refineries and emergency response oil spills. My time is valuable and costly. Although I am willing to assist moving this forward, I do not have the time or inclination to participate in a circular process (which in my experience has been the pattern in my dealings with the EPA over the past 23 years) ending up in a lot of effort for all parties involved with no beneficial result.

I am willing to work with you, but I am steadfast in my demand for immediate authorization. The Macondo 252 well is still leaking oil, and the authorization for use of OSE II is critical to the recovery of the health and wellbeing of the Gulf and its inhabitants.

I await your response.

Steven Pedigo

Name  
Title  
Address

September 21, 2011

Dear \_\_\_\_\_,

In response to your email of August 24<sup>th</sup>, 2011, I am compelled to correct several extremely erroneous statements that were made in it, and will attempt to clarify parts of it that were incoherent. Your email to me was in response to my request of July 3, 2011 to the EPA for long-overdue pre-approval status of the OSEI Corporation's first-response, non-toxic oil spill cleanup product, OSE II.

Unfortunately, the entire premise of your email response is incorrect. First of all, your letter does not clearly describe my earlier letter as what you are responding to; however, as it arrived a couple of weeks after the letter I sent RRT VI, I am assuming yours is in response to the formal request for a permit for or authorization of OSE II for the Deepwater Horizon oil blowout (known as DWHS) and permanent pre - approval status by RRT VI for the use of OSE II. I expect you to verify this in any future response to me so that it is known and clearly understood that we are discussing the same letter.

Your first sentence was,

*"I am responding to your email of July 3, 2011 to provide information on the process for authorizing the use of bioremediation agents for spill response, and to clarify what appears to be some misconceptions regarding the current status of consideration for use of your product on the remaining oiled areas from the Deep Water Horizon Spill",*

I did not ask for information on the process and your stating that I requested this information is a false statement in regards to my personal and the OSEI Corporations request for a permit and pre approval.

Your email misconstrued the premise of my letter. My letter was a formal request, personally and by the OSEI Corporation, for a use permit and/or authorization of OSE II for use on BP's Deepwater Horizon oil blowout, and permanent pre approval for OSE II. RRT VI has given a horrifically toxic product, Corexit 9527A full authorization and pre-approval status. The fact that Corexit 9527A is incredibly destructive has been fully verified and agreed upon in a joint consensus by numerous scientists and other highly credible authorities living on the Gulf Coast.

At the end of paragraph one, you state,

*"There appears to be misconceptions regarding the current status of consideration for the use of your product on the remaining oiled areas from the Deep Water Horizon Spill."*

By using the phrase "the remaining areas", it clearly shows that you are either completely out of touch with the reality of what is going on in the Gulf now regarding the on-going devastation and just how wholly inadequate the past remediation efforts have been, or you do not want the full scope of on-going damage that the blowout is creating to be known. There are and have been numerous reports of new oil from the well and seabed fractures on a continuous basis, and the new, fresh oil has been fingerprinted by independent scientists as unquestionably from the Deepwater Horizon well.

Contrary to Dana Tulis' (the EPA's Deputy Office Director in the Office of Emergency Management) assurance to me in the winter of 2011 that since July 2010 only 210 gallons of the highly toxic Corexit had been applied, there are numerous reports, as well as video's and pictures, of unmarked aircraft applying Corexit near shore. Just one of the C130's that was filmed doing the spraying as recently as a month ago holds ten times that amount, and there have been smaller C120, or C123's that have been documented as applying Corexit near shore, as well. You, as a representative of the EPA/RRT are allowing the continued application of Corexit, if for no other reason than the fact that you have the means to stop it and are not doing so.

Contrary to your statements, there are no misconceptions regarding the current status for the use of OSE II. In future correspondence with me or my company, I would appreciate it if you would use the proper name for the product - "OSE II" - rather than referring to it as "your product." This is not my product, it belongs to the OSEI Corporation. In your following response, please acknowledge this correction. The OSEI Corporation has fully documented the fact that OSE II has been directly requested by not only the responsible party, but also Gulf State officials, one City Council, and a letter from the U.S. Coast Guard that stated the FOSC should take action with OSE II. None of these were honestly addressed or acted upon by the EPA/RRT VI. Most were summarily ignored, despite the fact that the formal requests were coming from key stakeholders with representatives on the RRT.

In a recent meeting I had with BP's Senior Legal Counsel and 3 other BP attorneys. They reiterated the fact that BP had made the request for OSE II in June of 2010, and EPA denied their request. BP's lawyers stated they were bound by the government's decision. I asked why they were bound by it, since the EPA/RRT decision is costing their company needless billions of dollars. **The BP lawyer stated that they presented several items, and the EPA/RRT's decision was final.** [I don't understand this sentence.]

This is an outrageous situation for a company to be in: forced to use the EPA/RRT VI's "preferred", as you described it, mechanical device cleanup and horrifically toxic dispersants that have exponentially increased the devastation caused by the blowout, and then forced to pay for all the damage created by the EPA/RRT's arbitrary and unscientific decision. It would seem that, in a court of law, BP has a great defense: "We tried to switch to a non-toxic, effective cleanup response and the RRT/EPA wouldn't let us; therefore we are not culpable for the destructive

aftermath of the use of proven-to-be ineffective, yet 'preferred' EPA/RRT cleanup response methods."

On several occasions now, I have had to send formal letters to correct false information that Sam Coleman (the EPA's Director of the Superfund Division) and Charlie Henry (NOAA's Lead Scientific Support Coordinator for the BP Deepwater Horizon Oil Spill) have made. They have used baseless supposition to cast aspersions on OSE II, mischaracterized OSE II, and defamed the OSE II product, all of which are unlawful actions and outside of their and other EPA and government officials' employment contracts. In fact, the RRT VI and EPA officials who have justified the use of either versions of Corexit, and who have stated that it helps to breakdown the oil into droplets so microbes can digest them, is a false representation of both products' capabilities. The EPA has known since 1992 that anything with 2 butoxy ethanol in it prevents and slows degradation because it is so toxic that it kills the microbes. Yet Lisa Jackson and representatives from DOI, DOC, NOAA, and the Coast Guard have all made false statements in regards to what either of the Corexit products actually do, and this, too, is outside of their employment contracts.

The EPA, RRT VI, DOC, DOI, and Coast Guard have all made incorrect statements that have misled Gulf residents and the general public, showing great bias and favoritism toward one company's products. This, also, is outside of these employees' employment contracts. The fact that RRT VI has pre-approved one product out of the over 200 that have come and gone on the NCP list since 1989 also demonstrates flagrant favoritism to one company's product, especially in light of the fact that Corexit destroys the environment and the living creatures in it.

Your letter does not address my formal requests. Instead, it focuses on numerous items that have nothing to do with the original letter. I can discuss numerous merits of spill response and the EPA and other governmental agencies, if that's what you want to do. I assure you, science, experience and common sense are not on your side. Your "preferred" response of mechanical clean up and dispersant-Corexit has been absolutely proven to be a total failure, harmful to the environment, marine species, dangerously compromising human health, and needlessly running up clean up costs to an estimated 42 billion dollars, as of this date.

There is a scientific report that fully demonstrates the water, sediments, seafood, and human blood VOC levels are now at an extremely high level, proving that your "preferred" response of mechanical devices and allowed response of toxic dispersants to be a complete failure. This document proves that your "preferred" response is a failure and is backed up by the pictures and videos of millions of dead marine species that have died, as well as the pictures and videos of millions of gallons of oil coming ashore under the water's surface in plumes, or tar balls, all making boom response obsolete.

The next item you focus on in your email is the process for approving the use of bioremediation agents for use in spill response, and that the process for pre-



approving such uses is established in 40 CFR part 300 subpart J. The arrogance of quoting such a fundamental and basic regulation to someone who has effectively cleaned up over 16,000 oil spills and who has the largest non-toxic spill response company, and who has the only non-toxic, first-response product on the NCP list is somewhat astonishing but certainly not out of character based on my extensive experience with the EPA/RRT over the past 23 years.

More importantly, you have quoted regulations, laid out by Congress to guide you in your RRT activities, that have either not been read by you, or, if read, not understood as they clearly state the opposite of the point you were trying to assert.

First, regarding Section 40 CFR, Part 300, Subpart J 300.910, it clearly states:

*“RRT’s and Area committees shall address as part of their planning activities, the desirability of using appropriate dispersants, surface washing agents, surface collecting agents, bioremediation, or miscellaneous oil spill control agents listed on the NCP product schedule”.*

That is exactly what I expect the RRT and Area committee to carry out with my formal request and the OSEI Corporation’s formal request for the permitting, authorization and pre approval of OSE II. I am requesting only that you do your job, per the regulation you quoted.

The EPA/RRT has failed to do this since you requested BP to test demonstrate the bioremediation products before they were approved for use. This shows you were not adequately prepared for a spill despite the fact that the EPA/RRT spends enormous amounts of taxpayer money to be prepared for. Since OSE II is the only first-response, non-toxic bioremediation product on the NCP list, and since the ongoing devastation to the Gulf is continuing to get worse, you need to act on and follow your regulation immediately with OSE II.

Had you read and/or understood all the information I sent the EPA/RRT VI, you would have seen that there are Louisiana State Senators, as well as DEQ officials, that want OSE II utilized immediately. These are key stakeholders with natural resources being destroyed every day that passes without effective cleanup response methods employed. Louisiana Governor Jindal’s fast-track review panel studied all of OSE II’s information, efficacy testing, toxicity testing on fresh and salt water species, dispersant test, metals and chlorinated hydrocarbon tests, OSE II’s extensive clean up experience on open water and sensitive shorelines, marshes, and even ground water, and deemed OSE II as a clean up product they wanted used immediately. So, unless there is some other agenda going on that has nothing to do with cleaning up and protecting the natural resources which are entrusted to your protection, your review panel should come up with the same, since it is made up of academia and stakeholders just like the Governor’s panel.

By quoting the stated regulations, you have pointed out the RRT’s and the area committee’s job. It would appear they have not adequately performed this task of addressing the desirability in the past since they had no idea as to the function,

experience, and nature of OSE II, an NCP listed product. As is noted in my formal request and many of the attached documents to that request, your region VI EPA has successfully used OSE II on a sensitive US navigable water spill on the Osage Indian reservation. After two years of unsuccessfully trying to utilize "preferred" mechanical methods and allowed dispersants to clean up that spill, the RRT VI finally allowed OSE II to be utilized and the entire spill was cleaned up in a matter of one month. So RRT VI has experience, themselves, with the safety and benefit of using OSE II in sensitive marsh and shoreline settings. Again, this was pointed out in the formal request. How can you deny something that has proven successful use in the field previously, forcing a responsible party to carry out a previously-proven-to-be-inadequate response?

Also stated many times in the documents I sent, and which can be easily verified with \_\_\_\_\_ of the U.S. Navy, OSE II was used on 100's of spills in the sensitive bay area of the San Diego Bay for three and a half years, with dolphins, whales and other marine life nearby, with no adverse environmental effects and no marine life harmed. Please make sure the DOC and DOI, as well as all the RRT members, fully understand that as it is in stark contrast to what happens when either version of Corexit is used. The real significance of this information is that if OSE II was going to cause any environmental, wildlife, marine life, or human health problems, these would have shown up in that environment with the hundreds of times of repeated use. None ever arose.

As you may know, Nick Nichols reviews product information to ascertain a product's acceptability for the NCP list. He, Debra Dietrich (the EPA's Associate Administrator for Homeland Security) and others witnessed the U.S. Navy's Steve Fry when he and his assistants stating that they had used OSE II "hundreds and hundreds of times" to cleanup spills in San Diego Bay and had never had a single adverse consequence. This information was also pointed out in the documents for the pre approval and use permit or authorization request for OSE II to be used on BP's Deepwater Horizon blowout.

OSE II has an enormous track record of use on open water and in sensitive areas, as well as for ground water for drinking, shoreline and marsh areas. The EPA/NETAC Efficacy tests, the EPA NCP test of 2009, thousands of tests by governments, universities and militaries, irrefutable real-life cleanups in the field, and the recent BP Bio-Chem Strike Team's successful tests at LSU all prove beyond a shadow of a doubt how effective OSE II is at converting oil to a tested, scientifically predictable, substantiated end point of CO<sub>2</sub> and water.

The more than 14 toxicity tests on fresh and salt water species, of which over 7 of the toxicity tests were performed by Hap Prichard at Gulf Breeze Florida, proves that no matter what ingredients are contained in OSE II, there are no toxicological problems with the use of OSE II in sensitive areas, and certainly nowhere near the toxicity of the lethal Corexits that the area command and the EPA/RRT have signed off on for pre approval, despite the fact that Corexit's own MSDS clearly states "do not contaminate surface waters" with it.

I mention the toxicity tests since NOAA's Charlie Henry defamed, mischaracterized, and used supposition and innuendo to thwart the approval of OSE II for the DWHS. His statements are on record through RRT meeting minutes. His actions were unlawful and outside of his employment contract. Sam Coleman and the EPA then used Charlie Henry's statement, that he "will not allow a product with surfactants to be used" as a scientifically unfounded reason to thwart the implementation of OSE II by the U.S. Coast Guard and Louisiana DEQ. Henry's statement was scientifically baseless and showed that not only had he not reviewed OSE II's technical information, which is clearly contained in our technical package and open to the public on our website, but it also showed that he does not understand mother nature's own process of oil spill cleanup. Nature creates and incorporates the use of surfactants as part of the cleanup process of any toxic site. I am bringing up, once again, these baseless attempts to thwart OSE II in case they happen to rear their head again as a "scientific" reason to not use OSE II.

There is no scientific or valid reason of any kind not to use OSE II in open water, beaches, shorelines, or marshes, since OSE II has been used successfully in these areas for 23 years. There are no destructive "trade offs" with the use of OSE II, as the EPA's Administrator Lisa Jackson admitted there are with the use of toxic chemical dispersants like Corexit.

The regulation you referred to clearly lays out the job the RRT and Area command are to do, or, otherwise, be proven to be derelict in its duties. If the EPA/RRT actually carries out the regulations you reference, oil spill response can move forward with OSE II and leave behind the antiquated, outdated response methods that the DWHS has so painfully proven, once again, to be complete failures.

The second part of your second paragraph states

*"The federal on scene coordinator (FOSC) may approve the use of such agents during a spill response, with the concurrence of the Regional Response Team (RRT) representatives from EPA, the states with jurisdiction over the waters threatened by the release or discharge, and in consultation with the appropriate DOC and DOI natural resource trustees".*

There have been numerous requests for the immediate implementation of OSE II on the DWHS from officials described in the above regulation. The State of Louisiana Department of Environmental Quality (LA DEQ) requested the demonstration of OSE II at least twice. Louisiana's Governor Jindal tried to get OSE II demonstrated in the field. (A side note to this is that Sam Coleman, through Dwight Bradshaw, threatened me that if I complied with the Governor's request for a demonstration there would be dire consequences for the OSEI Corporation. This act was unlawful and an extreme divergence from the EPA's mission statement or Sam Coleman's employment agreement.) The Coast Guard sent a letter to the FOSC to take action with OSE II. OSE II was successfully tested by the BP BCST with LSU, and OSE II has been on the NCP list for many years. It was also demonstrated successfully on the BP spill in a marsh area in Mississippi on the order of Mississippi State Senator



Tommy Gollot, after which he made a formal request for it. There is *no* scientific reason to not use, authorize, pre approve and permit OSE II. Despite all of these requests that squarely fall under the regulation stated above, the EPA/RRT/FOSC has continued to ignore and/or thwart any efforts to effectively cleanup the devastatingly destructive environmental impacts being created by the DWHS.

Your next statement that

“the Federal On Scene Coordinator (FOSC) may approve the use of such agents during a spill response, with the concurrence of the Regional Response Team (RRT) representatives from EPA, the states with jurisdiction over the waters threatened by the release or discharge, and in consultation with the appropriate DOC and DOI natural resource trustees. In the case of the Deepwater Horizon spill, the USCG provided the FOSC, and has made no request for concurrence by the RRT representatives listed above on the use of your product.”

I am assuming you mean OSEI Corporations' product, OSE II. Correct?

My response to the above paragraph will be covered in several paragraphs below.

First, we possess the document where Dr. Tsao of BP's BCST requested the approval to the Coast Guard for the demonstration of OSE II in the field. Mr Goetzee scolded Dr. Tsao, then stated he would submit the request, and he added the statement Charlie Henry of NOAA had made, when he stated “I do not think the RRT will approve of the demonstration since there are products with surfactants.” This shows the Coast Guard and the RRT were misinformed as it implies that there is something wrong with a product that has a surfactant. They obviously are not aware that there are different types of surfactants. Those that Mother Nature uses to safely and in a non-toxic way clean up oil spills and other toxic sites, compared to some that are man-made toxic surfactants like the ones in Corexit which the EPA/RRT have approved for use in massively destructive quantities. Charlie Henry's scientifically baseless statement has harmed the OSEI Corporation's ability to sell its product, and the liberty to make money.

The documents show there was a request by the responsible party for the use of OSE II, and there were, also, direct requests to Unified Command by state senators. If the Coast Guard did not let everyone know of the request, then I am assuming you are pointing out the FOSC was derelict in its duty. As I also stated the FOSC was directed by Coast Guard Grothen, Connecticut to take action with OSE II; so if the FOSC failed to carry out all the actions possible to protect the natural resources of the United States, they should be reprimanded, at the very least. Since the EPA is the Co-Chair with the USCG, they are supposed to help out in an emergency, as well.

There were several direct requests by DEQ for the demonstration of OSE II and other products, and EPA refused to act on them, as well. There were numerous requests for OSE II and, by flagrantly ignoring the requests or covertly thwarting their efforts to protect US natural resources and the public's health, the EPA/RRT

did not fulfill its duties and violated its mission statement, which caused the OSEI Corporation to have to send direct requests to the RRTs for a permit, authorization and pre approval. Even a cursory study of the data would show that, per your regulations, the EPA/RRT is required to do this.

In your email, you mention that DOI is a natural resource trustee, and is one of the decision makers. I want to alert you to the fact that the RRT trustee for natural resources, US Department of Interior through BOEMRE, in June of 2011, tested and compared OSE II, dispersants/Corexits, and mechanical clean up. The study showed that, once again, OSE II worked extremely well and converted 67% of the oil to water and CO2 in 28 days, which means that, if given just a short time more, 100% of the oil would have been converted to CO2 and water achieving a total cleanup.

Compare that to Corexits in the DOI study, which, of course, did not clean up any of the oil, but only sank it below the surface and spread it throughout the water column, prolonging the oil's time in the environment and exacerbating it's toxic impacts. The study pointed out that as the temperature drops so does the sinking ability of the Corexits. Predictably, the testing of mechanical skimming showed skimming could occur in the DOI study; however, the best that can be expected from mechanical clean up is 2 to 8% which is absurdly inadequate, since this leaves 92 to 98% of the oil to contaminate the environment. These two types of response have proven in the BP DWHS to be inadequate, and they both exacerbate natural resource destruction or needlessly allow it.

The fact that the DOI a natural resource trustee has successfully tested OSE II now should prove OSE II should be authorized, and or pre approved. More scientific reason that OSE II should be the EPA/RRT's preferred response because it limits natural resource damage, and has a 100% predictable application end point of CO2 and water.

Your next paragraph states

*"In response to your request for issuance of a permit for use of your product on BP's Deepwater Horizon Macondo oil blowout of April 20, 2010 there are no existing authorities for issuing such a permit."*

This is really disingenuous. Because of my long experience with the EPA/RRT and other government agencies I have noticed that it is common practice to frequently change terms and terminology in order to confuse what would be a simple issue to normal people. In light of that fact, I wrote my formal request in such a way that it covered several ways to make the request, with the intention of covering all bases so that it couldn't just be arbitrarily brushed off. In my request, I stated,

*"In light of all of the above, I, Steven R. Pedigo the individual, and the OSEI Corporation hereby request the immediate approval of the implementation of OSE II, and that a permit be issued for the use of OSE II*

*on BP's Deepwater Horizon Macondo oil blowout in the waters of the Gulf of Mexico that began, per reports, on April 20, 2010."*

The entire request was not specific to a permit; it covered approval and implementation, and permitting, as well as pre approval. Therefore the fact that there is no authority for permitting should not stop the EPA/RRT VI from fulfilling the regulation you quoted, by approving OSE II for the BP DWHS, and pre approving OSE II, since there is absolutely no scientific reason not to authorize, pre approve, and allow responsible parties to utilize OSE II in region VI.

Regarding your next statement,

*"The goal of the RRT, in making decisions regarding the use of alternative spill response technologies is to minimize environmental damage."*

Minimizing environmental damage should be the standard for any response technology. Yet the damage that the EPA/RRT has allowed, supported and justified through the use of the two Corexits, as well as the inadequate mechanical response methods violate this standard to an astonishing extent as numerous scientists have proven.

OSE II is not an alternative technology, it is the only first-response, non-toxic technology that is the preferred method in many other countries where they want to actually clean up their oil spills. Mechanical clean up and dispersants cannot begin to compete with OSE II on any level or aspect of a spill. What should be considered as "alternative" should be mechanical means since they are relatively so ineffective.

The next statement in your letter states

*"...while Region 6 RRT has acted to issue pre-authorization to FOSC's for the use of dispersants in waters deeper than 10 meters, and/or farther than 3 nautical miles, whichever is farther from the shore".*

The fact that you have to limit this chemical dispersant from certain areas proves it causes problems to some areas of the environment. As the DWHS has proven, the problem is that the Corexit, after sinking the oil, causes the oil to come ashore underwater as tar mats, plumes or tar balls and this allows the destructive toxicity of the dispersants to adversely effect the marshes, shorelines, and beaches. So there is *no* area that is safe to apply dispersants. The millions of dead animals that lived in the water column are visual proof that dispersants should never be used.

Dispersants created more problems by moving the dispersant and oil into secondary areas, like the water column, the seabed, and into the marshes, and beaches, where the same oil that had dispersants applied to them out in the open water had to, then, be addressed a second time ashore, after devastating the environment while on their journey to the seashore. This type of response method creates endless secondary problems and not only does not minimize environmental damage it makes the negative impact exponentially worse.

Your letter then states that *“RRT 6 has maintained a policy of favoring mechanical removal of oil from the environment when feasible”*.

The BP DWHS has proven mechanical cleanup is not feasible, and allows too much damage to the environment. In fact, Exxon utilized mechanical cleanup on the recent Yellow Stone River, and they will now spend 42 million on a spill that could have been 100% addressed with OSE II with less environmental damage, for approximately \$900,000.00. Mechanical cleanup allowed more than 200 miles of shoreline to become contaminated. This allowed an enormous amount of environmental damage and did not minimize anything, other than Exxon's wallet.

Your letter then states,

*“The near shore and inland environments are ecologically diverse, and variables such as seasonality, temperature, nutrient levels, substrate environmental sensitivity, and the nature of the spilled oil all have to be taken into account in determining which spill cleanup methods minimize environmental impact.”*

All this sounds like a lot; however, one of the definitions of insanity is ‘doing the same thing over and over and expecting a different outcome.’ Supposedly the EPA/RRT is taking all of these variables into account, but then they unfailingly continue to carry out the exact same antiquated, proven-to-fail response. One could actually say that when it comes to oil spill response, the EPA/RRT do not need to exist, since, for 23 years, they have carried out exactly the same methods with no change, whatsoever, despite the unbroken sequence of failed responses. It is time for a change.

Your letter then states that, for the above reasons (the variables you mentioned),

*“it is highly unlikely that preauthorization would ever be issued for all navigable waters within Region 6 as you have requested”*.

Yet, scientifically, not one of the reasons you mentioned can be used as a valid means to not pre approve OSE II, since OSE II emulates mother nature's own process, and all OSE II does is speed the process up, to prevent toxic hydrocarbons from imposing their toxicological effects on the environment for an extended time. Doing nothing at all is the same as using OSE II slowly!

Regarding your next statement:

*“instead, decisions on the use of your product, pending a request for concurrence from a FOSC, would more likely be made case by case basis, and would involve consideration of the full range of available clean up methods, with the goal of minimizing overall environmental damage.”*

This statement *sounds* good because it implies that there are a lot of other products available and that the EPA/RRT diligently handles each one and approves or

disapproves of each one based on the strengths of its own merit. However, once one knows the history of the EPA/RRT over the past 23 years related to oil spill cleanup methods, and is familiar with the other very short list of bioremediation products on the NCP list, the statement becomes transparently disingenuous and misleading. Of the over 200 products that have come and gone on the NCP list over the past 23 years, and the only 10 or so bioremediation products that are currently on the list, the EPA/RRT has never once approved any other product for use on US navigable waters than Corexit. By so doing, the EPA/RRT has created and supported a monopoly for one product and one company and has shown pure bias and favoritism to that product/company.

Again, the EPA/RRT's have always allowed, supported and justified the exact same failed oil spill responses over and over and, in so doing, are absolutely responsible for extraordinary amounts of damage to the environment and the marine and wildlife. I do expect OSE II to be pre approved, since there is no scientific reason not to do so, as all the overwhelming evidence in the request information proved.

If, as you say, the "case by case" scenario was true, then OSE II would have been approved rather than thwarted by the EPA/RRT when a preponderance of the following occurred: 1) the responsible party requested it; 2) the Governor of Louisiana requested it to be field demonstrated; 3) LA DEQ requested it; 4) State Senators from Louisiana, Mississippi, and Alabama and the City Council of Destin, FL each made formal, written requests for it; 5) the U.S. Coast Guard wrote an internal "take action with OSE II" letter; 6) the multiple successful demonstrations on the BP spill, especially the demonstration in Mississippi on beach and marsh; 6) the EPA's own successful use of OSE II on the Osage Indian Reservation; 7) the new NCP listing test that the EPA did on OSE II; 8) BP's successful Bio-Chem Strike Team test performed at LSU. There are an overwhelming number of reasons to approve OSE II for the BP DWHS; yet NOAA and the EPA used scientifically baseless excuses to not thwart it, instead. So, again, the "case-by-case" scenario you assert in your letter does not exist, as the past 23 years has proven.

I expect OSE II to be immediately approved/authorized/permitted - whatever term you want to use - to get OSE II immediately implemented on the BP DWHS spill, and expect the pre approval of OSE II for RRT 6 just as you have given one company's product for 23 years. The only difference is that OSE II creates clean water, is safe, will not kill people or wildlife, minimizes environmental impact of the oil, and has a substantiated, tested endpoint of CO2 and water, which even DOI has recently proven. Corexit has no substantiated end point, spreads the toxicity far and wide, destroys or harms the environment and all wild life and marine life with which it comes in contact. As the information with the request also proved, OSE II meets all of the NOAA selection guide requirements. Corexit meets none of the NOAA selection guide requirements except that it is available.

There are several documents that will be included with this response, the DOI successful test, and a comparison of OSE II to mechanical clean up, and dispersants/Corexits, covering effectiveness, toxicity, compromised health, natural

resource damages, litigation, and costs. OSE II has proven to be far superior in every category!

BP's senior Legal Counsel stated that they would utilize what is available if I, and or the OSEI Corporation can get the government to change the response and stops preventing them from utilizing an effective method of oil spill cleanup. It's time to change from the outdated, proven-failure responses of mechanical clean up and dispersants/Corexits to the most world-wide preferred means to efficiently clean up oil - OSE II.

Sincerely,

Steven Pedigo

For 23 years – there are others who are suggesting that the use of OSE II would limit your ability to fine and penalize responsible parties – which would be a large amount –

Ask Jean – what percentage does the EPA gets for its own operational costs out of fines collected on responsible parties.

Also, no need for that kind of a tax – if you change to a more effective response, you'd reduce all that cost and the need for that tax. Trying to move it from 18 cents to 38 cents. When the price of oil goes up the gov is happy - = more tax revenue.

Check out David's -



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

June 27, 2011

Mr. Steven Pedigo  
Oil Spill Eater International, Corp.  
P.O. Box 515429  
Dallas, Texas 75251

Dear Mr. Pedigo:

I am responding to your email of July 03, 2011, to provide information on the process for authorizing the use of bioremediation agents for spill response, and to clarify what appears to be some misconceptions regarding the current status of consideration for use of your product on the remaining oiled areas from the Deep Water Horizon Spill.

The processes for approving the use of bioremediation agents for use in spill response, and for pre-approving such uses are established in Subpart J of the National Contingency Plan (NCP) in 40 CFR Part 300.910(b) and (a), respectively. The Federal On-Scene Coordinator (FOSC) may approve the use of such agents during a spill response, with the concurrence of the Regional Response Team (RRT) representatives from EPA, the states with jurisdiction over the waters threatened by the release or discharge, and in consultation with the appropriate DOC and DOI natural resource trustees. In the case of the Deep Water Horizon spill, the USCG provided the FOSC, and has made no request for concurrence by the RRT representatives listed above on the use of your product.

The RRT may also approve preauthorization plans for the use of bioremediation agents, if they are proposed by an Area Committee, with the concurrence of its representatives from EPA, the states with jurisdiction over the waters of the area to which a preauthorization plan applies, and the DOC and DOI natural resource trustees. The Region 6 RRT has received no such request for preauthorization of the use of your product.

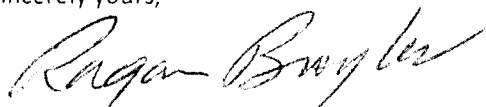
In response to your request for issuance of a permit for use of your product on BP's Deepwater Horizon Macondo oil blowout of April 20, 2010, there are no existing authorities for issuing such a permit.

The goal of the RRT, in making decisions regarding the use of alternative spill response technologies is to minimize environmental damage. While the Region 6 RRT has acted to issue pre-authorization to FOSCs for use of dispersants in waters deeper than 10 meters, and/or farther than 3 nautical miles, whichever is farther from shore, it has also maintained a policy of favoring mechanical removal of oil from the environment when feasible. The near shore and inland environments are ecologically diverse, and variables such as seasonality, temperature, nutrient levels, substrate.

environmental sensitivity, and the nature of the spilled oil all have to be taken into account in determining which spill cleanup methods minimize overall environmental impacts. For these reasons, it is highly unlikely that preauthorization would ever be issued for all navigable waters within Region 6 as you have requested. Instead, decisions on the use of your product, pending a request for concurrence from a FOISC, would more likely be made on a case by case basis, and would involve consideration of the full range of available cleanup methods, with the goal of minimizing overall environmental damage.

If you have any questions or would like additional information, please feel free to contact me or Mr. Jim Staves of my staff at 214-789-3417, or you can email Mr. Staves at, [Staves.james@epa.gov](mailto:Staves.james@epa.gov).

Sincerely yours,

A handwritten signature in black ink, reading "Ragan Broyles". The signature is fluid and cursive, with the first name "Ragan" and last name "Broyles" clearly distinguishable.

Ragan Broyles, Associate Director  
Prevention & Response Branch (6SF-P)



11/18/11

[Reply](#) ▼

Mason.Steve@epamail.epa.gov

Mason.Steve@epamail.epa.gov

[Send email](#)

[Find email](#)

[Add to contacts](#)

To stevenosei@msn.com, broyles.ragan@epa.gov, staves.james@epa.gov

Steven,

In response to your letter on October 1, we would like to meet with you to discuss your concerns and determine our path forward. In addition, the Region 6 Regional Response Team (RRT) will be considering the potential of developing a Bioremediation Emergency Response Plan, as other regions have developed. If this is successful, we would like to have you assist in the development of such a document, working with the RRT Industry Workgroup.

Please contact me to see when you would be available to meet with Ragan Broyles, Jim Staves, and myself after December 1, at 214-665-2276, or email me with potential dates you are available to meet. We can either meet at our offices, or other location around Dallas.

Faithfully yours  
Steve

"Frequently, my thoughts get bored and walk down to my mouth. Often, this is a bad thing."

Steve Mason, EPA Region 6 (6SF-PE)  
1445 Ross Avenue, Dallas, TX 75202  
214-665-2276 / 214-665-2278 fax



"OIL SPILL EATER"

13355 Noel Road  
1 Galleria Tower  
Suite 500  
Dallas, Texas 75240  
214/696-4559  
214/458-7618 - (FAX)

Mr. Erick Bretthauer  
Assistant Administrator  
Research and Development  
Environmental Protection Agency  
Washington, D. C. 20460

January 4, 1990

Dear Mr. Bretthauer:

We are extremely upset and concerned about the EPA's involvement with "INIPOL" and their refusal to even evaluate our product, "OIL SPILL EATER"!

In your letter to me dated October 20, 1989, you stated that the EPA does not "dictate products that will be tested or used". You also stated that "there are no other immediate actions that EPA can take beyond technical screening and recommendations that have already been rendered".

In light of your statements, please be advised of the following information:

1. We were informed by Mr. John Prince of Exxon at a meeting in Valdez Alaska on 10 August 1989 that EPA and Exxon had jointly funded a \$5 Million Research Project on Inipol with EPA putting up \$1.7 Million.
2. In November we were informed by an Exxon Manager that the EPA had, at an earlier date, directed Exxon, by letter, to test Inipol.
3. Also, in November, we were informed, that following this letter directive, Exxon either bought into the maker of Inipol or at least owns the distribution rights to Inipol.
4. In November via telephone, Messrs., Hap Prichard and Jim Clark of EPA in Gulf Breeze, Florida told me that although they had done extensive testing on Inipol, there was no way the EPA would test "OIL SPILL EATER" - even if we paid to have it done!
5. On November 28 through November 30, 1989, we attended a NOAA "Cleanup Technology Workshop" in Anchorage, Alaska. The Coast Guard, EPA, NOAA, ADEC, Exxon, and Exxon Consultants were all on the program. We ("OIL SPILL EATER") were allowed to attend but could not speak.

Mr. Erick Bretthauer  
January 4, 1990  
Page Two

The workshop turned out to be nothing more than a three day sales meeting with Exxon trying to sell Corexit and Inipol. Hap Pritchard gave a 1 1/2 hour presentation on Inipol.

6. Now we find that on December 14 and 15, 1989, the EPA called another meeting titled "Alaska Bioremediation Cleanup Research Planning Workshop". Guess what? It was another "Sell Inipol" meeting that attended by Exxon and even Inipol Distributors. Hap Pritchard ran the meeting and gave his pitch on Inipol again!

To say that we are upset with this situation is the understatement of the year!

We have two questions:

1. With your statement to me that the EPA does not recommend or support specific products, why is the EPA blatantly financially supporting and verbally promoting Inipol? It is obvious from the Valdez Field Test that Inipol simply will not do the job.
2. Will the EPA test and give "OIL SPILL EATER" (A United States Product) the same support you have and are giving Inipol?

All we have ever requested of the EPA is fair treatment. It is apparent that the EPA is not only giving Inipol preferential consideration, but have spent Millions of United States Dollars to sell a FRENCH Product!

Right now there are approximately 60 cleaners on the EPA National Product Code List, but NOT ONE - I repeat - not one can be used on an Oil Spill in the United States waters. WHY? Because no EPA representative will give permission to use any of the sixty (60) products listed. Why have the list?

Mr. Bretthauer, the EPA should be part of the solution, not the problem. After months of lengthy discussions with the other Federal Agencies, they feel about the EPA as we do. Namely, that the EPA is the stumbling block in getting products used on Oil Spills in the United States Waters!

I hope you will reexamine your position and the EPA's position on evaluating "OIL SPILL EATER" since we meet or exceed all existing protocol's for Oil Spill Cleaners.

Mr. Erick Bretthauer  
January 4, 1990  
Page Three

Therefore, we, again, request the EPA to test "OIL SPILL EATER" at an early date to enable it's use on your Phase II clean up test program in Valdez. Keep in mind, that all the problems inherent with Inipol are not a problem if you use "OIL SPILL EATER".

I would appreciate your early response.

Sincerely,

O. A. (George) Lively  
RADM, U.S. Coast Guard Reserve (RET)  
President

OAL:ajm

cc: ADM Paul Yost - USCG  
Comm. Wm. Riley - EPA  
Dir. Barry Sullivan  
Mineral Management Serv.  
Dir. Dave Kennedy - NOAA  
Mr. Richard Breedon - White House



13355 Noel Road  
1 Galleria Tower, Suite 500  
Dallas, TX 75240  
214/696-4559  
214/458-7618 (Fax)

"OIL SPILL EATER"

February 9, 1990

Mr. Erick Bretthauer  
Administrator  
Research and Development  
401 M. St. S.W. Room 913  
W. Tower  
Washington, D. C. 20460

Dear Mr. Bretthauer:

In addition to my letter to you of 4 January 4, 1990,  
attached are some additional items I request we discuss at  
our meeting on 13 February 1990 at 10:00 a.m.

Look forward to our meeting.

Sincerely,

O. A. Lively  
RADM, U. S. Coast Guard (RET)  
President

OAL/ajm

Enclosures

EPA MEETING - 13 February, 1990

ADDITIONAL DISCUSSION ITEMS

1. WHY DOES THE EPA NOT ALLOW "OIL SPILL EATER" TO BE USED ON ANY OIL SPILL IN U. S. WATERS?
2. WHAT TEST CRITERIA AND EVALUATION DID YOU USE TO DIS-ALLOW USING "OIL SPILL EATER"?
3. IF WE CAN SHOW YOU INDEPENDENT TEST RESULTS THAT PROVE "OIL SPILL EATER" IS NON-TOXIC AND ENHANCES THE BIODEGRADATION OF HYDROCARBONS TO CO<sub>2</sub> AND WATER, WILL THE EPA APPROVE OUR PRODUCT?
4. IF NOT, WHY NOT?
5. WILL THE EPA TEST "OIL SPILL EATER" NOW?
6. ONCE "OIL SPILL EATER" PASSES YOUR TESTS YOU REQUIRE, WE REQUEST "OIL SPILL EATER" BE APPROVED TO BE APPLIED ON ANY HYDROCARBON SPILL ANYWHERE IN THE UNITED STATES WATERS.
7. RRT SYSTEM.
  - A. OF WHAT VALUE IS THE EPA NATIONAL PRODUCT CODE LIST?
  - B. THE ENTIRE RRT SYSTEM IS GEARED TO MECHANICAL CLEAN UP.
  - C. WHAT EPA OR RRT MEMBER IN ANY REGION, DISTRICT, OR ANY ON-SCENE CO-ORDINATOR OR ADVISOR IS "QUALIFIED" TO RECOMMEND NOT USING "OIL SPILL EATER".
  - D. OPERATIONALLY, THE RRT AND OSC SYSTEM IS SO CUMBERSOM THAT IT ALLOWS MAJOR SPILL DAMAGE TO OCCUR BEFORE THEY CAN REACT.

EPA Mtg. 2/13/90

E. SYSTEM RESTRAINS TRADE SINCE NO OIL COMPANY OR CO-OP WILL STOCK PILE "OIL SPILL EATER" WHEN THEY KNOW IT CANNOT BE USED EVEN THOUGH IT IS LISTED ON THE EPA NCP LIST.

F. ASSUME FOR A MINUTE THAT "OIL SPILL EATER" ACTUALLY DOES WHAT WE CLAIM. THE EPA REPRESENTATIVES ALL SAY, "THE OKAY TO USE "OIL SPILL EATER WOULD DEPEND ON THE SITUATION, I.E., LOCATION OF SPILL, TYPE OF HYDROCARBONS, WEATHER, ETC."

QUESTION: WHAT HAS ANY OF THIS TYPE OF ON-SCENE "EVALUATION" HAVE TO DO WITH NOT ALLOWING AN OIL COMPANY OR CONTRACTOR TO IMMEDIATELY APPLY "OIL SPILL EATER" TO MITIGATE THE OIL DAMAGE AND CLEAN UP COST?

8. The EPA recognized the potential of "OIL SPILL EATER" (See attached EPA letter dated July 3, 1989 Results: (a)) as early as July 1989 and recommended further examination.

Why did the EPA not pursue this testing? Why did you push Inapol in lieu of?

O. A. (George) Lively  
RADM, U. S. Coast Guard (RET)  
8 February 1990

OAL/ajm



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Email: OseiCorp@msn.co  
Osei.Net (Web Site)

## **Congressman Pete Sessions**

### **Meeting - EPA and OSEI Corporation**

**January 28, 2004**

#### **I. Fourteen (14) unsuccessful years of Trying to Work with the EPA To Use OSE II On U. S. Navigable Waters.**

1. OSEI Corporation met with the EPA in early 1990. The meeting got us nowhere. We asked - "how long will it take for OSE II to be used on U. S. Navigable Waters? Erick Brethauer, (EPA) said - "not in your lifetime." Little did we realize the truth of his statement.
2. In 1991, EPA signed a Co-operative Agreement with the NETAC Corporation to test Bioremediation Products (approximately 10). OSE II was one of the products chosen to be tested. All Test Data from all of the Products were to be published and sent to the Vendors; however NETAC/EPA never published the results.

The EPA spent millions of public funds running tests on Bioremediation Products which they had no intention of ever permitting their use on U. S. Waters.

All vendors were promised they would all receive all the test data for their product. This never happened.

3. The OSEI Corporation repeatedly asked for our test results that were never sent to us. In 1995 we wrote to the EPA requesting our test data. The EPA said they had none and told us NETAC had the test results. We wrote to NETAC and were told that the EPA had our test data.
4. In October of 1999 - the EPA and RRT Regions III and IV published the Job Aids Book (allegedly to help OSC's On-Scene Commanders); decide which product to use on oil spills.



Just by accident, the Consultant Firm putting the Job Aids Book together called OSEI Corporation and asked us to review our data to approve or update the information.

Here, for the first time - the EPA published OSE II's Test Data they had claimed they never had since 1991 and 1992. We only received this data because the consultant sent it to us.

5. NRT meeting on February 1, 2000, San Antonio - Met Jim Makris - Co Chair of NRT. Gave Makris and CG Capt. copies of our test information. Makris told me in front of the NRT meeting that 11 years was long enough for us not to be pre-approved. Makris and the Coast Guard Captain promptly threw our test data away.
6. We finally got our data to Makris' Office and he had Al Venosa (EPA -Cincinnati Lab) review our comments. Al's letter - we called the "Kiss of Death Letter" dated April 20, 2000, was filled with lies and he even recommended OSE II be removed from the NCP Product Schedule.

John Cunningham, EPA-Oil Program Manager told me no one could remove OSE II from the NCP Product Schedule. Within 2 months, he was gone.

7. June 19, 2001, Steve Pedigo and I met with Makris, Elaine Davies, David Lopez, Nick Nichols, Earl Salo and the NRT Executive Director, at the EPA Headquarters. Makris did not want to discuss Vanosa's "Kiss of Death Letter" and particularly our seething response.

Makris agreed that we should move ahead in getting OSE II pre-approved for use on U. S. Waters.

We made the mistake of telling the EPA that OSE II had been successfully used at the Navy Fuel Farm in San Diego, California for 3 years.

Makris said we would all meet at the San Diego Fuel Farm to discuss their success with OSE II.

8. On December 7, 2001, we met with Nick Nichols, EPA - DC, Yvonne Adassi, Fish and Game, CA, Bill Robinson, EPA Region IX CA, OSHA Representative from Seattle, WA, the Coast Guard, Steve Fry's office (Navy Fuel Farm Manager). Nick Nichols first tried to hold an early a.m. meeting without Steve and I. When we found out - Elaine Davies forced Nick to have us at the meeting.
9. Nick presented us with the test requirements that Al Venosa had dreamed up **and tests not required by 40 CFR**. It was like a laboratory experiment and of course, Steve Fry did not have the data they requested.

What Steve Fry did tell the entire group was that he had used OSE II successfully for 3 1/2 years, cleaned up the fuel spills, with no adverse impact on the Eco System in the

San Diego Bay. He pointed out that he had Dolphins on one side of the fuel farm and whales on the other. Additionally, Steve had reduced his cleanup cost by 90%.

10. At this point - the Coast Guard Officer presented Steve Fry and the OSEI Corporation with a letter saying to cease and desist using OSE II or we would both be fined.
11. So - the only objective of the EPA on December 7, 2001 was to stop the successful use of OSE II - not to pre-approve OSE II.
12. The EPA's efforts to kill bioremediation continued. In February 2002, Al Venosa set up a "Kangaroo Court" (called his Scientific Panel) in DC, of the same people at the December 7, 2001 Meeting in San Diego, CA.

As a result of this meeting, David Lopez wrote us his "Letter of Lies" of June 20, 2002 said "OSE II does not biodegrade oil and we had to run the GC/MS test listed in 40 CFR or be removed from the NCP Product Schedule.

13. We have pointed out to the EPA they do not have the authority to remove us from the NCP Product Schedule since the Regulations, 40 CFR have not changed and neither has our OSE II Formula since being placed on the NCP LIST.

## **II. Proof that OSE II Works and should be pre-approved.**

### **1. EPA/NETAC Ran the following Tier II Tests on OSE II:**

- a. Respirometry Test - proving OSE II the best bioremediation product tested at degrading oil.
- b. Gravimetric Tests (Required by 40 CFR). To pass the test - must show greater than 5% degradation, OSE II showed 74.5% and 101% reduction against the control samples.
- c. Tier II Tests - GC/MS Test.
  1. EPA test showed a 98% reduction for light end oil and a 77% reduction for heavy end oil.
  2. NETAC Test showed a 64% reduction in light end oils and 59% reduction in heavy end oils.
- d. Gulf Breeze ran a toxicity test proving OSE II to be non-toxic.

### **2. Tier III Testing**

- a. The Tier III Tests tested OSE II on the most sensitive ECO areas; beaches, marshes, estuaries and open water.
- b. Gulf Breeze Lab ran 7 different toxicity tests on OSE II which proved to be non-toxic
- c. The EPA/NETAC each ran successful - Tier III GC/MS tests on OSE II.

### **3. Cleanups in the field:**

- Successfully cleaned up fuel spills in San Diego Bay at the Navy Fuel Farm for 3 1/2 years with no adverse effects on the environment and reduced cleanup cost 90%.
- Greenville Electric - Greenville, Texas - cleaned up a 1000- gallon diesel spill in a Creek.
- Texaco Crude Oil Spill on a 3- acre pond - 3000 gallons of crude oil.
- Recently - RRT approved OSE II's use on 3-1/2 year old crude oil spill on U. S. Navigable Waters. On November 21, 2003 OSE II was applied. In 2 weeks the diesel and gas - went from 11,000 ppm to non-detect. The heavy hydrocarbons reduced from 41,000 ppm to 25,000 ppm.
- Every day, military bases all over the world are using OSE II to cleanup fuel spills.

### **III. Proof of the EPA's Lies and Fraud**

1. EPA's own successful test of OSE II proves they have been and are still lying and committing fraud concerning OSE II's ability to biodegrade oil.
2. The EPA's has been violating our rights under FOIA since they have not given us all the test information that we continue requesting through FOIA.
3. The EPA and NETAC - to date - have not given us all our Test Data. This stack of test data is only a portion of the tests the EPA & NETAC claimed they did not have for over 10 years.
4. The EPA had all these tests and more when they required us to re-apply for NCP Listing in 1996. Despite having 9 toxicity tests on OSE II, they forced us to spend \$4,000 to perform a "dispersant" toxicity test.

### **IV. SUMMARY**

The real tragedy in this entire 13- year fiasco is that the EPA with NETAC and other EPA Laboratories have wasted millions and millions of tax payer dollars testing Bioremediation Products while at the same time has knowingly prevented any Bioremediation Product from being used on Navigable Waters.

The EPA's actions have caused thousands of spillers to be fined millions of dollars by the EPA not allowing the spillers to use the most effective procedures for cleaning up oil spills on U.S. Waters.

By so doing, the EPA has caused huge adverse impact on the Nation's Environment and Eco System; since booms, skimmers and absorbents can at best, only capture 20% of the spilled oil.

Compare that to the San Diego Fuel Farm, where OSE II cleaned up 100% of the spilled oil and reduced cleanup cost by 90%

The EPA, by their actions, has violated their **Charge** from the President to protect the environment and Natural Resources of the United States.

OSE II has been successfully used around the world for 14 years on water, soil, concrete and asphalt. With the EPA's own successful lab test and OSE II's successful cleanup of actual spills on land and U. S. Navigable Waters, **how can the EPA not pre-approve and why has the EPA not pre-approved OSE II's use on all spills on U. S. Navigable Waters?**

Therefore, we demand the following:

1. Have Dr. Berkey of NETAC, Al Venosa and all the EPA people involved in the oil program state in writing that OIL SPILL EATER II is an effective Bioremediation Product for oil spills and is EPA recommended for oil spills and other organic contaminants on all U. S. Navigable Waters.
2. Have the EPA direct the National Response Team (NRT) to advise all RRT regions and particularly the States, DOC, DOI, EPA and CG Representatives that OIL SPILL EATER II is an effective, first response tool and shall immediately be pre-approved and used on oil discharges or other organic contaminants on all U. S. Navigable Waters. (Don't let the EPA tell you this cannot be done. The NRT did it for Exxon's Correxite 9527, the most toxic Dispersant on the NCP and Correxite is being pre-approved and used in more and more Regions).
3. Agree in writing that the EPA and Al Venosa will never again try to illegally or by any other means attempt to remove OSE II from the NCP Product Schedule List.
4. Immediately send ALL - REPEAT ALL - of OSE II's Test Data, from Berkey's Testing, Al Venosa's Testing, Tier II and Tier III and all of OSE II'S Tier III Testing whether performed by Ed Berkey, Al Venosa or the EPA's Gulf Breeze Laboratory in Gulf Breeze, Florida.

5. As was agreed to on June 19, 2001, have Nick Nichols immediately publish on the EPA website, all of OSE II's correct and truthful test information, which we will now hand to Dave Evans.

Ms. Dietrich - we expect your "Yes" answer today!

Sincerely,



G. A. (George) Lively  
Rear Admiral (RET)  
President/OSEI, Corporation

# **A COMPREHENSIVE COMPARISON BETWEEN OSE II, MECHANICAL METHODS AND CHEMICAL DISPERSANTS IN LAYMEN'S TERMS**

## **INTRODUCTION**

Oil Spill Eater II is the name of a non-toxic product which provides the means for moving oil spill response out of its current 19<sup>th</sup> Century methodology into the realm of advanced technological 21<sup>st</sup> Century breakthroughs for swiftly addressing and remediating *100% of any spill in any environment*. **In comparison, current response methods employed by three major oil companies - BP, Exxon and Shell - are obsolete and obtain dismal results.**

Most recently, BP, Exxon, and Shell have utilized *mechanical clean up* on the Gulf of Mexico Deepwater Horizon (DWH) oil blowout, the Yellowstone River oil spill in Montana, and the recent oil spill in the North Sea, respectively. **Mechanical clean up in calm seas only has the capability of remediating somewhere between 2 and 8% of a spill; a woefully inadequate response.**

Also utilized in the Gulf of Mexico blowout was Exxon's outmoded invention *Corexit*, a chemical dispersant licensed to Nalco Holding Company for manufacturing and distribution. The label on this horrifically toxic dispersant clearly states it can cause kidney failure and death and the MSDS (Material Safety Data Sheet) specifically warns, "Do not contaminate surface water" with it. Additionally, toxicity testing in regards to marine species shows little tolerance by all forms of sea life; thus, applying it on spills as a preferred response method **increases the toxicity of the spilled oil on which it is used**. Despite this, millions of gallons of Corexit have been sprayed on and injected into the Gulf's waters.

## **THE EPA'S DESTRUCTIVE POLICIES**

The EPA (Environmental Protection Agency) requires that any dispersant product applying for inclusion in the Code of Federal Regulations National Contingency Plan Product Schedule of approved products for oil spill cleanup, known as the NCP list, undergo a dispersant test before permitting their use on spills in US navigable waters. A dispersant product must demonstrate that it causes a minimum of 45% of the oil to sink within 30 minutes, despite the contrary indication to this as a standard because the NCP list states that it is illegal to sink spilled oil.

Hence, one of the US EPA's illogical criteria for addressing a toxic spill is that it moves the oil into the secondary water column zone. This spreads the toxic contamination throughout the most vital area for marine life where at least 60% of marine species live. (The catastrophic results of this are being thoroughly documented in increasing numbers of science papers currently being released.) The purpose of cleaning up an

oil spill is to remove the toxicity from the environment so that living organisms, even single-celled organisms, can survive. What is the logic, then, in adding Corexit, an even more toxic substance than the oil, to spread the contamination throughout the living environment of the majority of marine life species? **A spill's damaging impact should be limited, not purposefully expanded and moved into additional, secondary areas.**

After a period of time, dispersants then cause the oil to sink to the seabed, adversely effecting bottom dwellers and wiping out entire species. The sunken oil then causes additional problems such as the depletion of oxygen from the water because so much *carbon\** has been loaded into the water column. Depletion of oxygen causes mass die offs (called fish kills) where enormous numbers of marine life are obliterated all at once from extreme lack of oxygen.

This, however, is not the end of the destructive onslaught of the chemical dispersant response. Next, the cleanup response to the DWH showed that, even when dispersants are applied up to 75 miles away from the shore, the oil can still, through underwater plumes, be delivered to the shorelines where even greater natural resource destruction then ensues in, yet, a third and unnecessary assault on natural resources by the same oil. The intertidal zone species - species that live in sand, rocks, and marsh habitats - become coated with oil and the life is suffocated out of these areas.

To be deemed effective by the US EPA, dispersants merely have to be capable of sinking oil, not cleaning it up. In fact, there is no "defined end point" (scientifically predictable end result) to the application of dispersants. Contrary to baseless media reports, a Woods Hole Oceanographic Institute study completed in March 2011 demonstrated that the oil is taking longer to degrade than expected and showed that it would have been better to do nothing, rather than spray/inject massive amounts of toxic Corexit on and into the Gulf waters. When one understands the natural processes by which Mother Nature cleans up an oil spill (how ever long it may take, left to her own devices) it becomes scientifically predictable as to why the application of Corexit has slowed down the oils natural degradation because the highly toxic dispersant kills and suppresses the naturally occurring microorganisms that would otherwise digest the oil and break it down into its non-toxic components. By destroying the natural microorganisms, it prolongs Mother Nature's clean up time, needlessly extending the toxic impact of the oil and dispersant on the eco system.

## **NEEDLESS HEALTH AND ECONOMIC CONSEQUENCES**

An oil spill cleanup response that includes toxic dispersants only increases the number of areas negatively impacted and intensifies and escalates the adverse effects by the spilled oil. It causes large numbers of species to be wiped out of the water column, seabed, and intertidal zones. This, in turn, severely impacts commerce in the region associated with harvesting US navigable waters, and endangers tourism, and all geographically or economically associated industries.

As can easily be seen on the MSDS of both Corexits, they cause a wide variety of extremely serious physical ailments: severe respiratory problems; kidney and liver failure; internal hemorrhaging; skin lesions; sudden and severe dizziness and nausea; short-term memory loss; long-term, flu-like symptoms which do not resolve with standard flu treatment; severe eye damage; severe compromise of immune system; reproductive problems; and death.

The EPA has been negligent in the extreme to permit over 2 million gallons and more of this product to be sprayed and injected into the delicate eco system of the Gulf of Mexico.

Scientists tracking the Gulf of Mexico spill have proven that these dispersants have compromised thousands of responder's health, as well as the citizens that live and work on the Gulf Coast from Texas to Florida. This devastation was easily predicted when one simply reads Corexit's product labels.

### **PREDICTABLY DESTRUCTIVE BUT DOWNPLAYED "TRADE OFFS"**

The EPA's website states that there are "tradeoffs" with the use of Corexit/dispersants, although they do not clearly define what these tradeoffs are. If the American public had more fully understood that these tradeoffs were enormous natural resource damages, death and compromised health for untold numbers of responders and Gulf residents, with no positive benefit on the other side of the tradeoff, it is unlikely that this method of response would have been tolerated.

Economically, where is the logic of using a cleanup method with "tradeoffs" that only exponentially increase the cost of a spill's cleanup response, especially when there is a non-toxic alternative, which has absolutely no tradeoffs?

There are currently fantastic costs mounting based on aggregating evidence that clearly shows the enormously exacerbated damages associated with this type of response. These unnecessary costs include, among others, litigation fees, damaged health, loss of life, shattered livelihood, disastrous social and community impact, entire populations and generations of marine life species decimated, long-term devastation to the environment. Given these far-reaching losses, toxic chemical dispersants should be immediately eliminated as an oil spill response method.

### **A COST-EFFECTIVE, THOROUGH SOLUTION**

Again, the reason it is important to clean up a spill is to reduce the toxicity to the environment and to reduce the time period over which living organisms are exposed to the toxic contamination so that they can survive. Toxic chemical dispersants destroy organisms, from the smallest microbes to the largest whales, and endanger wildlife and



the public's health, as well. Mechanical methods are utterly inept, leaving in place the majority of the spill, which increases the length of time the environment and marine life are exposed to the toxicity.

All of the above destruction to natural resources, human health, and the economy can be completely avoided. There has been an extraordinary technological breakthrough in the field of oil spill cleanup. Completely non-toxic and safe, it does *exactly* what Mother Nature does to clean up a toxic site. The *only* difference is what would take Mother Nature decades or centuries to clean up takes only a few weeks to achieve the same result, with absolutely no negative side effects. It is the only product in its field that is a *first and only response method necessary* to achieve 100% cleanup of an oil spill. It is a fraction of the cost of other antiquated solutions such as chemical dispersant and mechanical means. It has a scientifically proven, defined end point that it achieves once applied: it turns the oil into water and CO<sub>2</sub>. It causes absolutely no negative side effects or tradeoffs. It has effectively cleaned up over 16,000 oil spills in the past 23 years. And it is already on the EPA's NCP list. It is called Oil Spill Eater II (OSE II).

Below are charts and bullet-points comparing OSE II to both mechanical means and dispersants in the following areas: effectiveness, toxicity levels, human health consequences, natural resource damage, cleanup costs, and the potential for creating expensive litigation and payouts.

## **COMPARISONS BETWEEN OSE II, MECHANICAL METHODS AND CHEMICAL DISPERSANTS**

### **Clean Up Potential**

<b>OSE II</b>	100% conversion to CO <sub>2</sub> and water
<b>Mechanical</b>	A maximum of 2 to 8% of the oil is actually removed from the environment.
<b>Dispersants/ Corexits</b>	0% clean up. Their only predictable result is that they sink and spread toxic oil throughout delicate waters, causing destruction and the need for secondary clean up on shorelines (multiplying the clean up costs and damages)

### **Toxicity Factors**

<b>OSE II</b>	<ul style="list-style-type: none"><li>A. OSE II, itself, is completely non-toxic. OSE II confines and limits toxicity of the oil to the original spill area: starts reducing toxicity immediately upon application; prevents toxicity to marine and wildlife, humans, seabed, shorelines, marshes and estuaries.</li><li>B. Toxicity tests on OSE II by US EPA and foreign governments</li></ul>
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show OSE II to be completely non toxic to fresh and salt water marine species.

- C. One of the many official confirmations of this is that in 1989 OSHA wrote a letter stating there were no toxicological concerns with any of the OSE II ingredients that would pose a significant health risk to humans.

**Mechanical**

The oil itself is toxic to the environment. Leaving 92% to 98% of the oil in the environment increases the toxicity to the water column, seabed, shoreline, marshes and estuaries, adversely effecting marine species, wildlife and humans, as well as all associated flora and fauna.

**Dispersants/  
Corexits**

- A. Increases the toxicity of the oil. Causes a variety of serious physical ailments and death to responders and citizens who are exposed to the vapors, water, and oil where it has been applied, through inhalation or direct contact. Kills marine and wildlife species, destroys plants and all associated flora and fauna. Spreads the dispersants' and the oil's toxicity throughout the water column, eventually sinking it to the seabed, much of which then moves into the intertidal zones.
- B. EPA toxicity tests show both Corexit products to be very toxic to marine species, and show they increase the toxicity of oil to the marine environment.
- C. The product's label states that Corexit causes kidney failure and death and the MSDS of it's most toxic component, 2 butoxy ethanol (which comprises, by volume, 60% of Corexit) details dire human health consequences when exposed to it. It has been shown that the use of Corexit on the Valdez spill compromised and shortened the lives of thousands of responders.

**Human Health Consequences**

**OSE II**

Can be handled without any adverse health consequences as proven during the Megaborg spill when, to prove just how non-toxic it is, a small amount of OSE II was ingested on Houston TV, Channel 11 News. OSE II reduces to just a few days the time frame during which a spill will have toxicological effects on humans, marine, wildlife, flora and fauna. OSE II's official Material Safety Data Sheet shows it to be completely safe for human contact, and for the environment.

**Mechanical**

Allows 92% to 98% of a spill to spread and linger for years, exposing humans that work and play in water settings and intertidal zones, to be continually exposed to the toxicity of the oil.

**Dispersants/  
Corexits**

Dispersants cause parts of the oil to gas off, putting the oil and distillates and 2 butoxy ethanol (the most toxic chemical in Corexit and which comprises 60% of the volume of Corexit) into the atmosphere, compromising human health and vegetation inland upon which it falls through rain and evaporation/condensation. Dispersants attach to oil and sink the oil into the water column where humans swim, dive, snorkel, or stand in the water, or come in contact with it from spray from waves on beaches or shorelines. Direct contact by accidental spraying when atomized dispersant drifts onto responders compromises health. Exposure causes severe respiratory problems; kidney and liver failure; internal hemorrhaging; skin lesions; sudden and severe dizziness and nausea; short-term memory loss; long-term, flu-like symptoms which do not resolve with standard flu treatment; severe eye damage; severe compromise of immune system; reproductive problems; and death.

**Natural Resource Damage**

**OSE II**

Prevents natural resource damage by preventing the oil from contaminating secondary areas. It does this by eliminating the oil's adhesive properties so that it will not stick to anything, including marine species, wildlife, sandy beach, rocks, marsh grass or other vegetation, sediment, humans, as well as boats, booms, nets, etc. All are then protected from the toxicity of the oil.

**Mechanical**

Allows 92% to 98% of the sticky oil to destroy natural resources and allows the lingering toxicity of the oil to spread widely throughout the eco systems and environment.

**Dispersants/  
Corexits**

Increases the oil's adverse impact on natural resources, and the highly toxic dispersant adds to the destruction, spreading the spill to the water column, sea floor, shorelines and intertidal zones, adversely affecting all of these additional areas, and adding unnecessary costs to a spill event.

**Litigation**

**OSE II**

Prevents litigation by causing oil to float up out of the water column and seabed (while still making the oil very difficult to see). This also allows marine species to escape the spill by swimming under and away from it. Because OSE II eliminates the oil's adhesion properties, it cannot adversely affect intertidal zone flora and fauna, and this prevents loss of jobs in the areas of

tourism and seafood harvesting and marketing, which protects the spill area's economy. Human health is protected. All these litigation points are eliminated or reduced dramatically.

**Mechanical**

Creates massive potential for litigation since 92 to 98 percent of the spill is allowed to affect the water column, seabed, flora, fauna, intertidal zones, and humans associated with the shorelines. Adversely effects the economics of tourism, harvesting and marketing seafood, and compromises human health. All these areas, and more, are potential litigation points that occur from oil spill events.

**Dispersants/  
Corexit**

Exponentially increases the potential for litigation since they unnecessarily exacerbate and spread the oil's impact to endless secondary areas, killing marine species, sinking oil eventually to the seabed, killing bottom dwellers, coral and other flora and fauna, which, in turn, adversely effects the harvesting of sea food, kelp and other flora. Allows oil combined with the more toxic dispersant to contaminate intertidal zones, shorelines, flora and fauna, adversely effecting human health, as well as tourism. If for no other reason, the cost of litigation due to the use of dispersants should put them into the category of a completely unviable option for decision makers involved with a spill event.

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The use of mechanical methods and or dispersants has proven in the Gulf of Mexico on the BP Deepwater Horizon spill to increase the spill's damaging impact on natural resources, cause the death of millions of marine and wildlife, heavily damage the economy in the northern Gulf shore States, and compromise the health of the responders and the public who live along the Gulf. It has heavily impacted the seafood, tourism and recreational industries throughout the entire Gulf. BP has needlessly spent billions of dollars on cleanup methods that are ineffective, and which, in turn, only increase resource damage and cause cleanup costs to spiral even higher by having to address the same oil when it comes ashore a second time. It has lead to the filing of thousands of lawsuits against BP.

## **COST COMPARISON**

Comparing costs of oil spill cleanup between OSE II, mechanical methods and dispersants/Corexit, it is easy to see which spill response tool is far superior to any other oil spill cleanup method. As of April 2011, BP reported to their stockholders that it has spent between \$26 - \$28 billion on the DWH spill. In early September, 2011, that number was updated to 42 billion dollars. This necessitated the suspension of stock dividends in having to set aside \$41 billion for potential predicted costs for the spill at that time. The OSEI Corporation does not know exactly how much BP has actually

spent on this spill and the breakdown of those costs; however, BP has reported spilling 200 million gallons of oil between April 20<sup>th</sup> and July 23<sup>rd</sup>, 2010, so for comparison purposes we will use this figure, with the understanding that these figures are somewhat hypothetical. Nonetheless, the point below is clear, despite the fact that the amount of actual oil spilled and/or monies paid out by BP may not be accurate.

Per BP's reports, \$42 billion had been spent as of April 2011 for 200 million gallons of oil. When one divides \$42 billion by 200 million gallons, it comes to a cleanup cost of \$210 per gallon of oil spilled using a combination of Corexit dispersants and mechanical clean up methods. This does not include any of the current or future litigation costs, litigation pay out, or natural resource damage costs, which will be in the hundreds of millions to billions of dollars.

The OSEI Corporation has determined, through contractors, that the cost to apply OSE II is approximately \$2 per gallon of oil spilled in the Gulf. (The OSE II cost per gallon of oil cleaned up would be slightly more in other countries.) When you take into account deployment costs, our calculations show that for each gallon spilled it would require \$4 to convert 100% of the spilled oil to CO<sub>2</sub> and water, depending on how fast OSE II is applied. 200 million gallons times \$4 equals \$800 million. This means that, had BP used OSE II as its first and only response tool, it would have saved BP \$41.8 billion on the Deepwater Horizon spill.

The low cost of application is due to the fact that the spill is very large, whereas with smaller spills the initial response causes the cleanup price per gallon of oil spilled to be higher. Despite this, in 2000 the US Navy performed a cost analysis between their use of OSE II, and their earlier, inadequate oil cleanup responses with mechanical equipment. They found that, with the mechanical methods, they were paying around \$92 to \$96 to clean up each gallon spilled. When they switched to OSE II, the Navy documented that they had cut their cleanup costs down to \$12 per gallon of oil spilled, effectively reducing their clean up costs by 87% for each gallon spilled. This, while successfully addressing 100% of each spill, compared to the earlier methods they had used which only addressed about 5% of the spill, allowing the rest of the spill to adversely effect the environment.

If BP achieved an 87% reduction of their costs for the DWH blowout this would mean reducing their current costs down from \$210.00 per gallon spilled to \$27.30 per gallon spilled. Using OSE II would have saved BP \$36.5 billion dollars, while dramatically reducing potential litigation costs and payouts.

## **ANOTHER EXAMPLE OF WASTED FUNDS AND LOST PROFITS FOR AN OIL COMPANY**

Exxon's pipeline break under the Yellowstone River in the summer of 2011 released at least 42,000 gallons of oil into the environment. Exxon responded originally with 345 laborers with chemical suits, gloves, and absorbents that looked like paper towels. In a few of the affected areas, Exxon trapped some of the oil on the river and tried to skim it, reclaiming, at most, about 5% of the oil and collecting a lot of contaminated water. This, then requires it's own secondary clean up procedures, adding even more unnecessary cost to the cleanup. The contaminated absorbents then had to be collected, taped up with duct tape, and piled up for their secondary clean up process, as well.

The spill initially contaminated approximately 20 miles of shoreline, predictably upsetting Montana residents and stakeholders. **Because Exxon continued the inadequate response with absorbents and mechanical clean up, the spill then contaminated over 240 miles of shoreline.** The natural resource damage fees will be exponentially more than they ever should have been. And only a small fraction of the oil will ever be cleaned up in this way, leaving behind a contaminated mess, lowered property values, health risks to the public and wildlife, and an even lower level of public confidence that the oil companies can responsibly handle any of their inevitable accidents. In early September 2011 it was reported Exxon will spend 42 million dollars for this very small spill!

Compare this to what would have occurred had OSE II been utilized instead. The clean up cost with so much labor and equipment could have been reduced to a couple of water trucks on the shoreline driving to the areas they could reach by road and simply deploying OSE II from the shore. The spill itself would have required four water vessels with OSE II staged on them with simple ejection systems to apply OSE II. Two of the vessels could have been set up just past the spill migration point, addressing oil as it moved down the river preventing the oil from migrating past their staged area. Two more vessels could have started at the source of the spill and moved down the river applying OSE II on each shoreline and in the water, until these vessels reached the staged vessels preventing further migration.

The four vessels and two water trucks would have required a total of 24 employees, and could have addressed the entire spill in a matter of days, reducing damages, contaminated shoreline, labor costs, and preventing any secondary clean up problems. There will inevitably be litigation and fines, most of which could have been limited or prevented. The estimated cost with the OSE II response is between \$800,000.00 and \$1.2 million, a huge difference in cost, just by changing to a more effective, non-toxic response, OSE II.

## SUMMARY

There is a clear choice when it comes to oil spill response. On one side you have the antiquated, inadequate response methods with toxic dispersants and mechanical

means. To their discredit, dispersants clean up 0% of the oil but, instead, merely sink it, increasing damages and adverse impacts, and extending and exacerbating secondary clean up problems. Similarly ineffective are mechanical means. At the very best, they clean up 2% to 8% of the oil, allowing 92% to 98% of the spill to adversely impact the environment. Both responses cause extensive natural resource damage, compromised public health, death of marine and wildlife, destruction of flora and fauna, adverse impacts on the economy of the area, and prompt expensive fines. All of the above provides endless opportunities for extremely costly litigation. Both dispersants and mechanical clean up methods are extremely expensive and are fundamentally ineffective if the purpose is to actually clean up the oil. In fact, with regard to toxic dispersants, it would be far better to do nothing at all, rather than create further destruction through their use.

On the other side is a cutting-edge, non-toxic, first response technology which provides a highly economical means to effectively addressing spills and limiting clean up costs, preventing and/or dramatically limiting damages to natural resources, marine and wildlife, the economy, and the public's health, and thereby averting and/or markedly lessening the potential for litigation. With dozens of official scientific studies and reports validating its safety and effectiveness, and the empirical results of over 16,000 effective oil spill cleanups since 1989 with no adverse side effects reported of any kind, OSE II is the clear choice for oil spill cleanup.

### **LOWERED PUBLIC RESISTANCE TO DRILLING**

The successful use of OSE II would allow the responsible party of a spill to not only improve its public relations with the public and governments, but it would engender heightened confidence that, when the inevitable, occasional spill occurs, it can be efficiently and thoroughly cleaned up leaving little damage and ill will in its wake. The public perception of oil spill response today, and rightly so, is that a spill is going to create long-term devastation to the area in which it occurs. Repeated examples of the devastation resulting from the use of antiquated response methods - dispersants and mechanical means - have shaped the public's opinion.

OSE II would allow the responsible parties of an oil spill to 1) meet their fiduciary obligations to their stockholders, 2) comply with their governance policies, 3) protect the natural resources, and the public's health, safety, and welfare in those areas in which they are operating, and 4) quickly return a spill area to pre spill conditions while reducing cleanup costs. OSE II is the clear economic choice when it comes to oil spill response; the numbers prove it.

Steven Pedigo  
Chairman/CEO OSEI Corporation

# WORKSHEET

## CALCULATIONS REGARDING THE EXTENT OF CONTAMINATION IN THE GULF OF MEXICO

### Deepwater Horizon Incident 4/20/2010 to Present

12/2/2011

Introduction: The following worksheet attempts to layout the parameters of existing contamination from the Deepwater Horizon (DWH) incident currently in the Gulf of Mexico (GOM) and, based on those figures, to predict future levels of contamination that can reasonably be expected within given periods of time. The purpose of these calculations is to give decision makers an understanding of what the potential realities are, although what is laid out here is in no way the “worse case scenario”. They are provided in the hope that a change in cleanup response to safer, non toxic solutions will be allowed to mitigate the growing contamination present in order to restore our GOM waters to pre-spill conditions. Only this avenue will minimize the magnitude of predictable consequential economic damages.

#### CONTAMINATION WORKSHEET

Definition: *Contaminate* – to pollute, taint, infect, poison.

Ref: Collins English Dictionary

- Toxicity for LA sweet crude oil has a toxicity of 2.9 based on EPA tests cited at: <http://www.epa.gov/bpspill/reports/phase2dispersant-toxtest.pdf>
- The **Toxicity value** (LC 50<sup>1</sup> for Corexit 9527) is 2.0 on one species and 4.0 on another species, so averaged this becomes 3.0 (meaning that 50% of the test species died within 96 hours once it came in contact with an average of 3 parts Corexit to one million parts water).
- **Contamination factor:**  $1,000,000/3 = 333,333.33$  (This is how many gallons of water one gallon of Louisiana Light Sweet crude oil and/or Corexit 9527 will contaminate.) This information can be found on the US EPA web site.
- No one knows with absolute certainty the actual number of gallons of oil that was discharged from the Macondo Reservoir between April 22<sup>nd</sup> when the oil first

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<sup>1</sup> LC stands for "Lethal Concentration". LC values usually refer to the concentration of a chemical in air or water. The concentration of the chemical that kills 50% of the test animals in a given time (generally between 4 to 96 hours) is the LC<sub>50</sub> value.

Reference: Canadian Centre for Occupational Health and Safety:  
[http://www.ccohs.ca/oshanswers/chemicals/ld50.html#\\_1\\_2](http://www.ccohs.ca/oshanswers/chemicals/ld50.html#_1_2)



- began to gush and July 20<sup>th</sup> when capping of the well was publicized.
- Scientific speculation about compromised sea floor and uncontrollable, gushing fissures created by the DWH disaster came to the public's attention when Geohazards expert BK Lim wrote a strong letter of concern to Congress on 1/14/2011 with attached videos taken by remotely operated vehicles of the seabed around the rig and his expert analysis of them. As the oil spill was reported to be capped after 100 days, and a total of 200 million gallons of "spilled" oil were acknowledged at that time, this averages out to 2 million gallons of oil spilled per day.
- Dispersant use began as a result of RRT protocols that dictated their utilization to treat the discharge. This continued until the discharge, per official reports, was halted on or about 7/29/2010 roughly 100 days +/- after it began at which time EPA reportedly instructed the responsible party to stop the dispersant use.
- Dispersant Ratio calculation for event:** At this time, BP/EPA/Coast Guard reported volume of oil released into the GOM from the blowout was stated to be +/- 200 million gallons. Also published were statements that a little less than 2 million gallons of dispersants were used to sink the oil. (This establishes an oil to dispersant applied ratio as published by both BP and EPA.) **This ratio is 100 gallons of oil to 1 gallon of dispersant.** *(Accuracy of the contamination of the GOM is subject to the accuracy of the amount of contaminants reported to the public. It is highly recommended that federal oversight afford more transparency through the utilization of inspection by independent 3<sup>rd</sup> party scientists to confirm the accuracy of volume of current flow.)*
- As of late November 2011, BP has stated that the purpose of the large number of oil-related vessels that are stationed around the well site are to study "natural seepage" from the seabed. As no natural seepage was reported in the initial geological surveys done prior to the drilling of the DWH well, BK Lim's analysis of what has occurred to the seabed floor as a result of the blowout and subsequent explosion appears to be confirmed.
- Many photographs and videos, as well as reported visual sightings confirm continued application of toxic dispersants and/or sinking agents to the present.

With the seabed floor around the Macondo formation fractured and releasing oil into the Gulf's waters on a continuing basis, it is vitally important to understand the amount of contamination present in order to make decisions related to proper cleanup response and damage mitigation.

Based on the points stated above, as of this writing, approximately 621 days of uncontrollable hydrocarbons have released into Gulf waters, with an unnamed amount of toxic dispersant and/or sinking agents now present in the GOM water column emanating from the Macondo Formation.

The amount of oil contamination is determined by multiplying the number of days (621) X (2 million gallons/day) yielding oil contamination in gallons of oil present in the GOM water column to be +/- 1242 billion gallons of oil.

- The amount of dispersants suspected to be present in the Gulf of Mexico water column

can be calculated by using the oil to dispersant ratio applied as stated above to be (100/1). If the leakage rate is accurate, then an amount stated to be present in the GOM that is probable is **1.242 billion gallons** of oil. The suspected amount of dispersants likely to be present is **12,420,000 gallons of dispersants** which is calculated by applying the ratio of 100/1. **Thus the total presumed oil and dispersant contamination is +/- 1,254,420,000 gallons.**

- Multiplying the amount of oil/dispersant (1,254,420,000 gallons) times the contamination factor of 333,333.33, the total is +/- **418,139,995,818,600.00 gallons of contaminated GOM water.**
- There are an approximate 643 quadrillion gallons of water in the Gulf of Mexico per the EPA's official web site.
- $418,139,995,818,600 / 643,000,000,000,000,000$  equals the percentage of total water contamination suspected to be in our GOM waters at present = **.065%.**

**This calculation is as of December 2<sup>nd</sup>, 2011 representing educated estimates that .065% of our entire GOM water column is most likely contaminated with toxins derived from the oil and applied dispersants after 621 days of ongoing leakage.**

Contamination is growing steadily as discharge of hydrocarbons continue unabated with toxic dispersants and/or sinking agents being applied. Per analyses of video documentation by BK Lim, cementing efforts have failed to stem the flow of oil through newly created fissures into the GOM waters.

### **Previous Warnings and Requests**

In March, David Fa-Kouri and Louisiana State Senator AG Crowe met with US Congressmen and/or their top Aides to raise awareness of the increasingly disastrous situation developing in the GOM and asked that they consider a direct change in the federal response from toxic dispersant to a safer bioremediation product (Oil Spill Eater II, OSE II) that was already on the EPA's approved list of products on the National Contingency Plan (NCP) for oil spill cleanup. OSE II would effectively clean up the hydrocarbon contamination and deliver a safe and scientifically defined end result of CO<sub>2</sub> and water. It is important to note that the responsible party, multiple state Regional Response Team (RRT) members, and local Gulf civic leaders had already made formal requests to use this NCP solution. Each of these requests was ignored. Additionally, it was recommended for use by USCG New London CT test labs on July 10<sup>th</sup>, 2011 after multiple official and scientific vettings. EPA officials verbally denied authorization and, when requested by the Louisiana Department of Environmental Quality to put their reasoning in writing, has, again, ignored the request.

OSE II is the only cost-effective mitigation solution available that could clean up both the surface and subsurface open ocean waters, beaches, marshes and estuarine environment, and that could additionally contain any on-going seepage in the finite geographic area around the fissure until it can be mechanically plugged. [See full documentation under "Technical Library" at [www.osei.us](http://www.osei.us).] At the time of those meetings, collateral damage to the public's health as a result of the use of the highly toxic chemical dispersants was a

serious concern that has now become a reality as medical, insurance, and private reports claim debilitating and life-threatening health consequences resulting from exposure.

BP and USCG received proposals in 2010 from the OSEI Corporation and its representatives to use OSE II coupled with application engineering supplied from MIT to abate both surface and subsurface contamination. OSEI representatives offered a means to safely mitigate the subsurface hydrocarbon plumes present last year in the GOM waters.

**DETOXIFICATION OF GULF WATERS IS THE ONLY OPTION AVAILABLE TO HALT THE SWELLING CONTAMINATION AND PREDICTABLE ATTENDANT PROBLEMS TO THE PUBLIC'S HEALTH, THE FISHERIES, THE TOURISM INDUSTRY, AND THE ENVIRONMENT.**

**Based on the above calculations, the trend shows 1% of the total volume of water in the GOM will be contaminated by September of 2012.**

**Based on the volume of oil in the Macondo Reservoir, combined with the attendant pressure levels, the ongoing, unnatural seepage could continue for approximately 20-30 years.**

Predictions below are based on the two assumptions that 1) no decontamination with OSEI is allowed to occur, and 2) toxic chemical dispersant and/or sinking agent use is allowed to continue.

Using the above calculations, it is estimated that **11.6 %** of total GOM waters will be contaminated over a 30-year period. Due to the utilization of toxic chemical dispersants, the ability of naturally occurring microbes to degrade the oil has been largely diminished as confirmed by Woods Hole Oceanographic Institute (WHOI) findings released January 27<sup>th</sup>, 2011. Because of the highly toxic nature of the contamination resulting from the combined oil and chemical dispersant, all forms of aquatic life are being impacted, as well as human health, as toxic Volatile Organic Compounds (VOCs) continue to gas off and cross contaminate other areas.

**Calculations:** Using the figure of **2 million gallons a day** being released into Gulf waters as a result of the DWH blowout, we added to this the estimated amount of Corexit based on the earlier application of 100/1 ratio of oil to Corexit openly authorized by the EPA. [See EPA web site] This amount of combined oil and toxic dispersant would result in 930 days of on-going contamination for the Gulf waters to reach the level of one percent contamination. Thus, every 930 days, or every 31 months, the gulf waters will grow in contamination by 1 percent. Based on the estimate that the contamination duration is expected to be 30 years or 360 months, then the GOM contamination would be approximately 11.6% of the total GOM waters.

**KEY:**

*D =dispersant contamination*

*O =oil contamination*

*g = gallons*

*d =day*

*333,333.33 = contamination factor from EPA table relative to toxicity of oil and dispersant*

*100/l = oil to dispersant application ratio derived from calculated amount of oil present,*

*643 Quadrillion = constant volume of water present in the GOM*

**Amount of contamination on 2/24/2011 (308 days since initial blowout):**

$(308 \text{ days} \times 2,000,000 \text{ g/d(O)} = 616,000,000\text{g(O)} + 6,160,000 \text{ g(D)} = 622,160,000 \text{ (total gal. of contamination O+D)} \times 333,333.33 =$

$207,386,664,592,800/643,000,000,000,000 \times 100 = .03225298046547$ , rounded to **.032 % of the GOM waters contaminated on 2/24/2011 at 308 days.**

**Contamination as of 12/20/2011 (621 days):**

$621 \text{ days} \times 2,000,000 \text{ g/d(O)} = 1,242,000,000\text{g(O)} + 12,420,000 \text{ g(D)} = 1,254,420,000 \text{ (total gal. of contamination O+D)} \times 333,333.33 = 418,139,995,818,600.00 /$

$643,000,000,000,000 \times 100 = .065029548338818$  rounded off to be **.065 % of the GOM waters contaminated as of 12/2/2011**

How long before 1% contamination of total GOM is reached? **930 days**

With oil leakage maintaining the same or higher level, and with toxic dispersant and/or sinking agents continuing to be used in similar quantities, **11.6% contamination of the total GOM waters** can be expected in a 30-year time period.

David Fa-Kouri,  
Strategic Economist

**Disclosures:**

*No one* knows, with certainty, exactly how much DWJ oil is remaining in the GOM water column as a result of the Deepwater Horizon disaster. Based on the information publically available, the data discussed in this worksheet and Strategic Consulting Group's subsequent economic decision point paper are deemed by our staff to be an accurate, conservative assessment of the current situation in the Gulf of Mexico.

The purpose of these calculations is to give decision makers an understanding of what the potential realities are, although they are in no way the "worse case scenario".

Strategic Consulting, Inc. has made a direct request through Garret Graves of the Governor's office of the State of Louisiana to the US Coast Guard's Federal On Scene Coordinator, Captain Hein, on August 25<sup>th</sup>, 2011, for independent scientists, utilizing a

manned submersible vehicle, to view the seabed floor to verify the condition of the wellheads and seabed floor attendant to the Deepwater Horizon blowout. This request has not been addressed as of this date. Per aerial photographs, video documentation, and a BP press release, BP has multiple oil-related ships actively present at the site of the DWH wellhead working on issues related to sea floor seepage. On-going plumes of massive amounts of fresh oil sightings that have occurred since August, subsequently verified through lab tests as oil from the Macondo/DWH, irrefutably point to ongoing and unnatural oil seepage.

## OSE II – SAFE AND RELIABLE BIOREMEDIATION FOR OIL SPILLS

### SCIENTIFIC TESTING, THIRD PARTY ENDORSEMENTS

Since 1989, OSEI Corporation has effectively cleaned up more than 16,000 spills as a first response method\* for cleaning up oil spills. The product, **Oil Spill Eater II**™ (OSEII) has been independently and rigorously tested in scientific settings the world over. It is distributed in over 35 Nations and is listed on the US EPA's National Contingency Plan for Oil Spills (NCP); OSE II is listed in the U.S. Defense Logistics supply chain and the Navy DENIX system as BAA Book 18 number 14.

Shoring up Mother Nature's own remedies, **Oil Spill Eater II** is the world's most environmentally safe and cost effective bioremediation process for the mitigation of hazardous waste, spills and contamination--virtually anywhere and of any size. It is environmentally safe because it uses nature's own bioremediation processes to effectively eradicate hazardous materials.

\*A First Response designated product means it can be used on fresh oil as an immediate clean up response method as opposed to being designed for use on weathered oil or chemicals. OSE II can also be used on weathered spills.

### THE PROCESS

When OSE II is applied to a spill:

- the biosurfactants attack the molecular structure of the Hydrocarbon, by breaking the spill into small particles, then the oil is solubilized which increases the oil/water interface--all in approximately 30 minutes.
- during this process the OSE II enzymes form protein binding sites act as catalysts to induce the enhanced bacteria to utilize the broken down hydrocarbon as a food source.
- once these reactions have taken place, several conditions become evident:



- a. the oil is broken up, adhesion properties are diminished (which causes oil to release from marsh grass, vessels, BIRDS, marine species, beaches and more)
  - b. the fire hazard is reduced (which protects responders & ports)
  - c. the oil is caused to float (which prevents secondary contaminated areas and water column oxygen depletion) and most importantly
  - d. the oil is detoxified so it can be used as a food source at which point the oil is digested to an end point of CO<sub>2</sub> and water;
  - e. And finally, the enhanced bacteria die off to pre spill background levels.
- While these reactions are occurring OSE II's nutrient system is rapidly colonizing indigenous bacteria (OSE II does not introduce non indigenous bacteria into any eco system).
  - Once the indigenous bacteria run out of the OSE II nutrients the bacteria then utilize the only food source left, the detoxified oil.
  - There are also constituents in OSE II that once mixed and activated by natural water cause OSE II constituents to molecularly adhere to hydrocarbons. Hence, no matter where the current or tidal action pushes the oil, OSE II will stay with it.

## **EFFICACY TESTS, SCIENTIFIC STUDIES**

OSE II can be used on the surface, below the surface, on the ocean floor, in marshes, estuaries, sand or soil beaches on rocks, in bays, ports and harbors. Ample case studies are available to prove it's workability in all mediums. OSE II is virtually non-toxic and extremely effective in breaking down oil. We suggest you go to OSEI Corporation's [Technical Library](#) to view the following:

(to view documentation and actual test reports, click the blue links below)

### **Salt Water Efficacy Tests:**

- U.S. EPA / NETAC 21 Day & 28 Day Bioremediation Test - Biodegraded Alaskan Crude 98% in 21/28 days. (pg 25-35)
- U.S. Respiriosty Test – EPA determined OSE II to reduce hydrocarbons by 98% and aromatics by 85% which was better than any other product tested. (pg 41-44)

- University of Alaska (Dr. Brown) PAH Test – Demonstrates that OSE II with mineral nutrients and hydrocarbons is **300%** more effective than without OSE II. (pg 45-49)
- Mega Borg Ship Spill in Gulf (South African Crude Oil) Test – In 216 hours OSE II lowered TPH from 100,070 ppm to 516 ppm for a 99.5% reduction. (pg 50-52)
- BETX Bioremediation Test- OSE II can even work well on Benzene, Ethyl Benzene, Toulene and Xylene ratios demonstrate the potential to biodegrade as much as 98%. (pg 53-56)

### Fresh Water Efficacy Tests:

- Chevron Crude Oil Bioremediation Test- OSEII on Chevron Crude in 24 days reduced 95,200 ppm to 690 ppm or 99.8% effective on biodegrading this oil.

### Soil Efficacy Tests:

- U.S. Marine Corps Base 29 Palms California (Cleanup Won Environmental Award) (pg 1-5)

### Salt Water Species Marine Toxicity Tests

- U.S. EPA / NETAC Mysid Toxicity Test (this test was run twice) – LC50 Test, at 96 hours OSE II greater than 2100 mg/L.
- Both Mummichog and Artemia Salina Toxicity Test – LC50 Test, at 48 hours OSE II is 5285 mg/L. (pg 14-23)

### Fresh Water Species Marine Toxicity Tests:

- Rainbow Trout Toxicity Test by Environment Canada-Toxicity tests state 1000 mg/L or less is toxic. Anything higher is acceptable and considered non-toxic. OSE II, test result 10,000 mg/L = non-toxic.

### Beneficial Environment Effects:

- Biological Oxygen Demand for OSE II –OSE II has minimal impact on BOD, less than 7%.
- Dispersant Swirling Flask Test - Proves OSE II causes oil to float



## **PRODUCT DEMONSTRATIONS, STATE OFFICIALS**

For a product overview from TV News and demonstrations see:

- WLOX News OSEI Corp and Oil Spill Eater II are demonstrated for all the Senators and members of Mississippi DEQ. The product shows how quickly Oil Spill Eater II. Can work to begin breaking down an Oil Spill.
  - After seeing this demonstration, Senator Tommy Gollott of Mississippi sent a formal request to the Coast Guard and EPA response team members requesting the use of OSE II.
- Department of Environmental Quality ALABAMA Demonstration:
  - DEQ Rep Contacted the Navy to verify they use OSE II
  - "This meets the criteria that the State of Alabama is looking for because it's not adding a 'superbug' it is a simple process, there is no magic" Alabama DEQ Rep.
  - After demo, Senator Hank Erwin sent formal request to use OSE II to EPA.
- Demonstration Video on DWH Oil on private property.

## **OTHER ENDORSEMENTS**

- Mr. Nick Nichols of the EPA oil program, and Debra Dietrich of the EPA Headquarters and Mr. Robinson EPA, Region 9 all have first-hand knowledge of OSE II being used in San Diego Bay by the U.S. Navy for over 100 spills, over a 3 ½ year period with no adverse effects to the whales, dolphins and other ocean ecology. OSEI Corp and OSE II are trusted and used by all 5 bodies of the U.S. Military.
- The EPA/Regional Response Team 6 had a success with OSE II on the Osage Indian Reservation.
- BP has used OSE II in Trinidad and Tobago and a refinery in Greece.

- OSE II has been extensively reviewed by the Navy Environmental Health Center in Norfolk, Virginia. Mr. Jerry Drewer was our Contact: (757) 363-5540. OSE II has also been extensively tested by the Naval Research Lab in Key West, Florida: Our contact was Mr. Jan Berge (305) 293-4216.